

# MILES ON A GALLON of GASOLINE WINS ECONOMY CONTEST



# 49 MILES Takes 2nd Place Winning Cars Equipped With WHIRIWIND GAS SAVERS

Automobile owners who have been worrying about gasoline expense will be interested in an amazing test recently conducted by a Texas Motor Car Company. Twenty-three cars were entered in a mileage economy test, the winning car running 51 miles on a gallon of gas, the second 49 miles on a gallon. When official test records were published it was found the two winning cars were both equipped with Whirlwind gas savers.

## "PEAK" CONTEST MILEAGES-A TEST ON YOUR CAR

The amazing results obtained in this mileage contest are naturally greater than those obtained in ordinary driving. Careful throttling, most economical speeds-and no waste of power thru quick stops, help to bring about these "peak" mileages,

More power, faster pick-up, Iess carbon, quicker starting, and increased mileage is what users say about the Whirlwind, Every motorist owes it to himself to test the Whirlwind to prove the results on his own

#### FITS ALL CARS

In just a few minutes the Whirlwind can In just a rew minutes the wintrum can be installed on any make car, truck or tractor. It's actually less work than changing oil or putting water in the battery. No drilling, tapping or changes of any kind necessary. It is guaranteed to work perfectly on any make of car, truck or trac-tor, large or small, new model or old model. The more you drive the more

#### GUARANTEE

No matter what kind of a car you have on how big a gas eater it is the Whiriwing will save you money. While we will save you money. While we will save to save the sost within 30 days or the trial will cost you nothing. We invite you to test it at our risk. You are to be the sole judge. No matter what kind of a car you have





The principle of the Whirlwind is to slightly compress the partly vap-orized gasoline as it passes thru the raised venturi. Extra air enters from four air inlets at such a tangent as to pick up the unvaporized gasoline particles, and whirling them into action.

The turbulence created breaks them into a vaporized gas, giving better, smoother power, quicker starting, cutting gasoline waste and carbon formation.

Car owners all over the world are amazed at the results of their tests. "I have more speed, power, and increased mileage," writes Henry Bomberger. "Hills I used to take in second I now make in high." Anton Wetsch: "I wouldn't take the Whitriwind off my car for any money." W. B. Fountain: "My mileage hars like reased preatly. My car has plenty of pick-up and satural tests in the reason of the satural tests."

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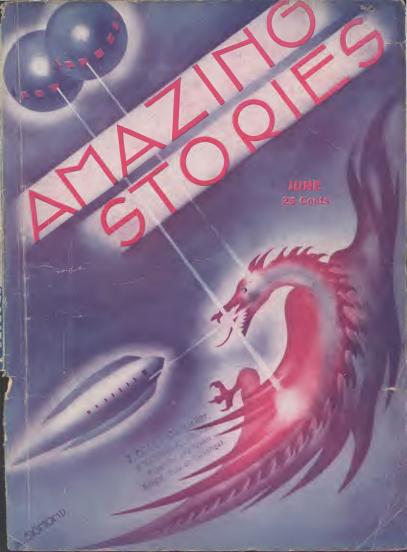
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# Amazing Stories

# Science Fiction

Vol. 8

June, 1933

No. 3

PORTRAVING HIS IMMORTALITY

#### In Our July Issue

THE INTELLIGENCE GIGANTIC, by John Russell Fearn.—Part II. The world is now tending toward despotic government and this story, giving a quasi-mechanical view of despotism, is extremely interesting and in the July issue is brought to an impressive finale.

CAVERN OF THUNDERS, by Harl Vincent. We have here one of those stories full of life and adventure and contest between different personalities which are so characteristic of our author's work and which have made him a great favorite with our readers.

HIBERNATION, by Abner J. Gelula. The author of this story has won for himself high standing as an author of science-fiction. We find the hero of this story anticipating his death but applying a method of his own to suspend animation so that he is transported into the future without appeal to the fourth dimension. We are sure that this topic treated from a medical standpoint will be highly appreciated by our readers.

And Other Science Fiction

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Prayer of an Elderly Philosopher (A Poem) By Pauline E. Thomas
The Crime Crusher  By Bob Olsen
What Do You Know? (Science Questionnaire)
Discussions

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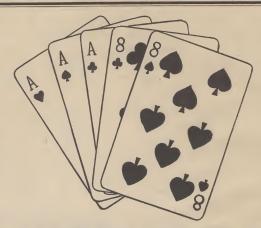
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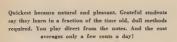
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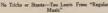
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VOLUME 8 JUNE, 1933 No. 3

T. O'CONOR SLOANE, Ph.D., Editor

Editorial and General Offices: 222 West 39th Street, New York, N. Y.

Extravagant Fiction Today - - - - - Cold Fact Tomorrow

# Soap Bubbles and Candles

By T. O'Conor Sloane, Ph.D.

THE great Faraday won fame by his popular lectures as well as by his work in theoretical science. His developments in electricity have been the origin of the present treatment of the subject, in the conception of lines of force especially. The greatest electricians of the day look up to Faraday as one of the founders of this great science whose enormous expansion, it is fair to say, he never imagined was in the future. He died in 1867.

When electricity was one of the most puny of the sciences, one of his lectures was on the candle. This is used to-day as a source of light to a very limited extent. We see lighted candles on the dining table but they are purely as an ornament. Yet, as they burn there quietly, without any attention whatever, we may be surprised over all that they tell us and of all the inventive changes which they imply. It seems simple enough to put some oil in a cup or saucer, to place a cotton wick therein and to light it. It will burn away if properly arranged until all the oil is exhausted drawing it up as if by a multitude of little pumps in amongst its fibers so as to maintain a flame at the topmost point. The lamps of old times and which have been used up to comparatively recent days, were far different from the kerosene oil lamp of this era. They were little vessels open to the air and provided with a little spout projecting from the upper edge so that they resembled a small teapot. These were filled with a heavy oil or grease, the wick was immersed in the fluid or grease, as the case might be, except for one end which was carried by the spout and which projected a little from the opening of the same. It must have been quite a troublesome operation to start one of these lamps to burning.

We need go but a few decades back to reach the era of flint and steel, when "fire" was produced by striking a flint against a piece of steel—the hard flint detaching little bits of steel from the mass so that the friction ignited them and they burned like the bright sparklets, with which the children of the present day amuse themselves. Iron and steel if finely enough divided will burn like sawdust. The flint with its friction and hardness did the work.

THE sparks were caught on tinder, a highly inflammable material, generally some preparation of cotton, and then by blowing upon this it caught fire and was brought up into vigorous ignition and was made to light a wick in one of the heavy oil lamps, or to start a fire. A subdur match was lit by the tinder.

Compare this operation with what we do at the present day if we want to light a candle or lamp. All this seems very simple. It is what everybody knows as far as the actual operation is concerned, but there is really a lot of science in it.

There is a force in nature called capillarity from the Latin word meaning a hair. It is a sort of attraction which exists between some liquids and some solids. This attraction it is which makes water wet objects must picture to ourselves when we look at a burning which are inserted into it. Calling upon this same force of capillarity it is perfectly simple to thrust your hand into a basin of water and take it out as dry as when it went in. The idea of naming capillarity from a hair is because its action is most manifest when a fluid is extremely finely divided or when it is in a thin layer.

We can divide the surface of a vessel of water into the minutest areas by sprinkling lycopodium, which you can get at any drug store, over the surface. There is an absence of capillary attraction between water and lycopodium. If one puts the hand or finger into a vessel of water whose surface is covered with the powder, it feels as if you had a finger of a glove on. As the water does not wet the lycopodium it forms a film which the powdery material pushes away from anything inserted, so that as before stated, the finger or hand will come out perfectly dry.

The surface of any liquid is taken as forming virtually a film. If a liquid wets a surface, that means that it has an attraction for it and the surface will pull the liquid up above its normal level.

Now, let us imagine that we take some liquid, say water. Without the least trouble we can make up a hollow ball or balloon out of it, a microscopic Shenandoah we might say, and a true liquid can be made to give us what we may call an impervious fabric and if we only had the happy faculty of astonishment developed in us, we would be ready to get one of the surprises of our life if we saw an impervious bag made out of water. And this is done when a child blows a soap bubble. A soap bubble is a little bag filled with air. We don't take much interest in seeing soap bubbles when they are blown, because we regard them as too ordinary to be objects of interest. They are really objects of the highest interest and most beautiful and interesting experiments can be carried out with the film of which they are constructed. A soap bubble is one of the most astonishing things in science or nature. When a devotee of natural science loses the faculty of being astonished at what he sees about him, and when he takes everything for granted, he loses one of his most important faculties.

WE may now ask what connection there is between a soap bubble and the action of oil in the wick of the lamp. The soap bubble owes its consistence to the strength of water film. In the wick, which oil will moisten, the attraction between the surface film of the oil and the fibre of the wick, draws the fluid upwards. The wick we say is lighted: really it is the oil that is ignited. A luminous flame is produced, the oil or liquid grease is drawn into the wick by capillarity. Little films of oil having an attraction for the wick rise in it and like the pistons of a myriad of pumps. draw oil up into the flame. The films, of which there are a multitude in an ordinary wick, act in a manner exactly analogous to what the film does in a soap bubble. It is strange to think that a film of liquid should have a strength comparable in a way to a true fabric. We

lamp that hundreds of thousands of little pumps are drawing oil up into it far up above the level of the oil or melted wax in order to keep the flame going.

We see then that capillarity can do a wonderful work. It is told when an obelisk in Rome was being raised to its pedestal that it would not come up quite high enough. Just a little short of its proper height. It is pictured as hung by ropes in a vertical position from the hoisting apparatus. The story goes that a voice from the crowd of spectators called out to wet the rope. This was done, the water entered into the pores of the rope, the little films' forced their way along, and as it were pushed the sides of the rope outwards, in other words, increased its diameter, so the rope had to shrink in length. So we can picture to ourselves that capillarity exerted by a myriad of little films of water lifted a fifty or sixty foot block of stone so that it could be set upon its pedestal.

Now these old lamps with their nearly horizontal wick, naturally gave a very unsatisfactory flame, it must have been quite odoriferous. When it was thought that a person worked too much over his literary productions, it was said that he wasted the midnight oil, or if it was thought that he worked too hard over them and produced a labored composition it would be said that "it smelt of oil." Of course, we can waste the midnight electric light, if we want to, but however labored our productions may be, no one can say that they smell of the electric light.

Many centuries ago the oil lamp with a vertical wick held in position by a little tube came into being and in one form or another such a lamp is in use today. A round wick gave an insufficient surface to the flame. We find this surface magnified in the everyday kerosene lamp by the use of the flat wick. The flame does its burning in quite a thin layer on the surface so it is essential to give it a good area.

An inventor named Argand is credited with the ingenious idea of increasing this surface area of combustion by introducing air into the middle of the flame and the cylindrical wick lamps which are still in use. (the so-called student lamp), though not at all extensively, are called Argand lamps.

ALL this development of the lamp from the smoky and unsatisfactory though picturesque utensils of some thousands of years ago, to the present lamp, flat wick or Argand, with a glass chimney to increase the draft, seems utterly simple and insignificant. But we must regard the development with great respect, when we realize that it took mankind long centuries to progress from the chimneyless lamp of the olden days to the lamp of the present times with its chimney.

It is an illustration of how apt we are to take things for granted and how we fail in the realization of the slow march of progress in the past. One of the astonishing things about the present is the rapidity of progress. Our inventors are moving on what a military man would call the double quick,

# Tumithak in Shawm

A SEQUEL TO

# Tumithak of the Corridors

# By Charles R. Tanner

 $m{1}$  N this sequel we see Tumithak of the Corridors in a new rôle. In the prededing story he showed his powers as an individual warrior and indicated what the inhabitants of the Corridors could do against the enemy on the surface of the earth. Now he appears as the leader of his followers in a contest against the evil powers that have been holding them in the Corridors. The contest is an impressive one and is vividly described by the author.

#### Illustrated by MOREY

#### Foreword

FIVE thousand years have passed since the shelks, leaving their home planet of Venus, invaded the earth and frove mankind from the Surface into the Pits and Corridors that were to the his home for twenty centuries. When at last he did emerge, a new Heroic Age was born, and we of to-day look back upon the leaders of that great rebellion as little less than demi-gods.

And of all the distorted, exaggerated traditions, perhaps the one most filled with magic and wonder is that of Tumithak of Loor. The first and actually the greatest of a long list of Shelk-slayers, men have, from the first, been tempted to attribute to him supernatural, or at least, superhuman powers, and to claim for him, even, the direct supervision of the Deity.

However, by using the knowledge that we have gained through recent archeological research, it is possible to roughly rebuild the life of that great hero into a rational possible story. Shorn of its prophecies, its miracles and its wonder, it becomes the tale of a young man who, inspired by stories of the great deeds of the past, determined to risk his life to prove that the shelks were vulnerable and could yet be conquered. The story of how he proved that to his people, the writer has already presented to the public—the story of the deeds that followed, he now presents in this continuation of the adventures of "Tumithak of the Corridors."

#### CHAPTER I

#### Shawm

HE long corridor stretched almost as far as eye could see its beautiful marble sides gleaming under the many varicolored lights which, carefully concealed in the walls, cast over the hall an effect of creamy mellowness. The pictures and geometrical figures that were carved in the soft white stone of which the walls were composed seemed to have been designed to co-operate with the lights to produce a single harmonious effect of surpassing beauty. Here and there, ornate doorways appeared, with great bronze doors on which scenes and figures had been cast that rivalled those of the walls for beauty. A few of the doorways lacked these doors, and these were covered instead with great drapes and tapestries, heavy with threads of gold and silver, and dyed with every color of the spectrum.

But the beauties of this splendid hallway were wasted, for in all its length not a human being appeared to appreciate them, and indeed, the thick dust that covered the floor and the many spider webs on the walls gave evidence of the months that must have elapsed since it had been deserted. Not for several years, in fact, had anyone entered this part of the corridor, not since one from far below had emerged from a well-like opening in one of the apartments and passed through this hall on his way to the Surface of the earth, far above. Even before his coming, the ponderous dwellers of this corridor had always feared this



Although this second man had not the other's tremendous strength and physical perfection, he was far above average humanity in size and muscular power, and the poorest reader of character could tell at a glance that he was intellectual of the two.

TUMITHAK IN SHAWM

hall of the pit and avoided it, for it led to the pits of the "wild men," and in the sybaritic life of the Esthetts. the least suggestion of danger was a thing to shun. And so this hall, in spite of its exceptional beauty, was always utterly deserted.

But now, after so long a time, sounds were breaking into the silence of the corridor. Soft rustlings, guarded whispers and muttered ejaculations were coming from one of the apartments, and after a few moments, a savage face peered out of the doorway; then, seeing the hallway quite deserted, its owner stepped into view. He looked up and down the hallway as though fearing an attack by some unseen enemy, but, after looking searchingly through several of the apartments and convincing himself that the passage was really deserted, he sheathed the huge sword which he had held in his hand and returned to the door from which he had emerged.

#### The Interlopers of the Corridor

H<sup>E</sup> was a huge, savage-looking fellow, this inter-loper, over six feet in height, with a great hairy chest and huge shoulders and with a chin that was covered with an immense growth of red beard. He wore a single garment, a rough burlap-like tunic that fell to his knees, into the cloth of which were sewn dozens of bits of metal and of bone, the latter stained in various colors, and worked into a crude pattern. His rustyred hair was worn long and around his neck was a necklace made of dozens of human finger bones threaded on a thin strip of skin.

He stood for a moment longer before leaving the hallway and then, re-entering the apartment, he called

He was answered by a low hoot and then another man joined him, a taller, younger man who was dressed quite differently. This newcomer wore a tunic made of cloth of the finest texture imaginable, sheer gauze that was dyed in the most delicate shades of nacreous pinks and green and blues. It was not a new garment, but worn and torn and sewn, as though it were highly prized by the owner, who had determined to wear it until it fell apart from old age. It was caught up about the middle by a wide, many-pocketed belt with an enormous buckle, a belt from which dangled a sword and-strange anachronism-a pistol! Around the head of its wearer was a metal band not unlike a crown, a band such as was worn by the chiefs of those enemies of mankind, the shelks. Although this second man had not the other's tremendous strength and physical perfection, he was far above the average man in size and muscular power, and the poorest reader of character could tell at a glance that he was the more intellectual of the two. And one could feel, too, that together these two would make a combination capable of facing anything with a good chance of winning.

They stood silently staring up and down the passage for a while and then at last the second man spoke to his companion.

Tumithak of the Corridors

WHAT think you of the Halls of the Esthetts, Datto?" he asked. "Are they not as wonderful and as beautiful as I have described them?"

"They are truly wonderful, Tumithak," the other answered. "Though of what use these strange pictures can be, I cannot tell. Nor can I understand why the curtains of the doors should be so elaborate." He paused and then his eyes brightened as he went on: "But there is a splendid idea in those metal doors. We must carry some of them back to the lower corridors. With one of them in his doorway, a man might well defend himself against a hundred enemies."

"Our only enemies now are the shelks," reminded Tumithak. "And do not think that metal doors would keep those savage beasts out, Datto."

Datto grunted and continued his disparaging appraisal of the corridor. It was obvious that he lacked the sense of beauty, that stirred, even though feebly, in Tumithak's breast.

"Which way leads to the Surface?" Datto asked, tersely, and when Tumithak pointed it out, he continued: "Let us call the others. No doubt they are waiting impatiently for the signal." Tumithak agreed, whereupon his companion re-entered the apartment and gave again the low call that he had given before. There was a pause, and then men began to emerge from the rear room, men who had been waiting eagerly at the bottom of the pit concealed in that room, and who now, at Datto's call hurried up the ladder to the level on which their leaders stood

The first to emerge was a lean young man with a hawk-like face, a young man whose close-cropped hair and wide, pocketed belt marked him as a citizen of the same town as Tumithak. Nikadur, this young man's name was, and as Tumithak's boyhood companion, he had been the first to swear to follow the Shelk-slaver wherever he might lead. This young man was closely followed by another, and if Nikadur bore evidence of being a follower of Tumithak, this other as obviously showed a similar relationship to Datto. Thorpf was this one's name, and he was the nephew of Datto, and helped him to rule the halls of the city of Yakra far below the surface.

And behind these two came many others: Tumlook, the father of Tumithak; Nennapuss, the chief of the city of Nonone, with his sons and nephews; and then man after man of lesser importance in the cities of the lower corridors, men who had never distinguished themselves, and whose only claim to fame lay in their undoubted loyalty to their chiefs. And here and there among them were members of a tribe upon whom the people of the lower corridors still looked askance: the savages of the dark corridors, their eyes wrapped in fold after fold of cloth, to keep out the brilliant light which was so painful to their sensitive optic nerves. These latter were slaves now, only recently subdued by the men of the lower corridors, but already the plentitude of food had made them willing servants.

#### Tumithak's Company of Warriors

In all, over two hundred men emerged from the pit and drew up in formation in the corridor, awaiting the word from Tumithak that was to start them on their raid on the Esthetts. They stood silent while Tumithak outlined to them briefly what he knew of the halls and corridors of this vicinity and then, at a softly spoken word, the entire party moved swiftly down the passage.

This raid on the Esthetts was the first of its kind that the people of the lower corridors had attempted. Since Tumithak had returned from the Surface to become their chief, two years before, he had spent most of his time in consolidating his government. There were some malcontents among the Yakrans and even among the Loorians and these had been made to feel the heavy hand of the new ruler, and, when the three cities were at last one in their allegiance, there were many little groups or "villages" in the side corridors that had to be brought under the Loorian's sway.

And when, at last, all the lower corridors unhesitatingly acknowledged Tumithak as their chief, the people had swept into the dark corridors, and in a short while the savages were conquered and enslaved, and all the pits below the Halls of the Esthetts bowed to the new leader.

It was then that Tumithak decided that the time was almost at hand to begin the raid on the halls of that race of ponderous artists that gave their worship and allegiance to the shelks. The Loorian was under no illusions as to what this meant. Although he failed to realize the exact relationship that existed between the Esthetts and the shelks, he knew that these obsec creatures looked upon the shelks as their masters, and would not hesitate to call them to their aid if danger threatened. And Tumithak realized, therefore, that an attack on the Esthetts was equivalent to an attack on their masters.

The shelks had "domesticated" the Esthetts and used them as we do cattle, lulling their suspicions with hypocritical lies and flattery and breeding them for bovine stupidity and trustfulness.

#### A Raid on the Domesticated Esthetts

TUMITHAK had postponed this raid, therefore, until the entire lower corridors were united, but once that was accomplished, he saw no reason for hesitating longer. He called for two classes of volunteers, those who were brave enough to aid in an attack on these creatures of the shelks, and those who would follow wherever led, even to the Surface. Tumithak knew that a volunteer army was the only type that he could take with him, and so when, of the thousands of people in the lower corridors, only some two hundred warriors responded, he perforce satisfied himself with this group, and started on his way. Fortunately, it seemed to him, the two classes of volunteers were identical, almost to a man.

And now this dauntless two hundred were swarming

through the Halls of the Esthetts, their swords bared and their war-cries trembling on their lips, waiting for the moment when Tumithak should give the word to attack. That leader, however, saw no cause for hurry, he led them on and on through the corridor, his chief desire being fo get as close to the center of the town as he could before he was discovered. And then at last, satisfying himself that he was not far from the Great Square of the Esthetts, he gave the word, and, in a trice, pandemonium broke loose in the Halls of the Esthetts.

#### The Raid Was a Massacre

THERE is little need to describe the ensuing battle. After all, it was not a battle but a massacre and, were it not for the absolute necessity of it, Tumithak would have dispensed with fighting the Esthetts at all. But he remembered Lathrumidor, the artist who had attempted to betray him on his way to the surface before, and so, realizing the treacherous nature of the huge Esthetts, he determined that they must die.

And die they did, to the last one; and when the band of victors assembled at the upper end of the Esthetts' corridor some forty hours later, it was a motley crew indeed. Many wore the delicate gauzes of the Esthetts, others still dressed in the rough tunic of their native halls. Some carried the swords they had brought with them, some carried other weapons, swords and spears that the Esthetts had fashioned, not indeed for weapons, but merely for their artistic beauty. And they were weapons now, as were many other of the creations of the artists. One man even held in his hand a delicate statuette of bronze, its end clotted with blood and hair where he had struck down some Esthett with it.

And to these men Tumithak spoke, and again told them of the necessity of immediately going on. The shelks often visited the Esthetts, he said. No one could tell at what moment they might come again. And rather than have the shelks surprise the pit-men, it were well if the pit-men at once moved to the Surface to surprise the shelks! "And so," he finished, "all who would follow me, be ready after the very next sleep, for then I intend to lead my party out to the attack." He dismissed the warriors and retired, himself, to try to secure a much needed rest.

After the sleep, Tumithak was pleasantly surprised to find that not more than ten men desired to remain in the Halls of the Esthetts. These he placed under the authority of Thurranen, a son of Nennapuss; and then, with nearly two hundred men following him, he set out for the Surface and—the shelks!

#### The Campaign Against the Shelks

THEY came at last to that narrow hallway of jet black stone that told Tumithak that they were perilously near to the Surface. He called his chiefs together and held a council of war. It was a momentous council, for this was the first time, probably, in

nineteen hundred years or more, that men had deliberately planned a campaign against the shelks. The most important thing that the pit-men lacked, the council decided, was knowledge of the Surface and of the ways of the shelks. This lack of knowledge, they felt, must be overcome at once, or any chance of victory would be lost at the very start. It would undoubtedly be necessary to send scouts up to the Surface to find out what the conditions were up there.

At this suggestion (which had been offered by Nennapuss), Datto the Yakran laughed loud and scornfully. In two thousand years, he said, only a single man had been found brave enough to face the dangers of the Surface. And now Nennapuss talked of sending out scouts, as though they were about to raid another passage of the dark corridors! Would Nennapuss suggest, perhaps, to whom he intended to offer this position of scout?

Nennapuss was about to reply with some heat, when Tumithak interrupted him.

"Datto," stated the Loorian, "when the people of one corridor invade the halls of another, the position of scout or spy is a dangerous one yet not overly important or honorable. But in this war of ours, the scout is all important, for not only our lives but the very future of man depends on what information he can bring up. Now, but one of all this body has ever looked upon the Surface, and if that one feels that he should surely lead the scouts that must go ahead of this army, can any one deny him the right?"

The lesser chiefs were astounded

"But we need you to lead the army, Tumithak!" they protested. "Never before has a chief taken such chances of leaving his men leaderless. Why, if you should die, the whole of the Great Rebellion would collarse!"

Tumithak smiled.

"Call the army together then," he suggested, "and ask for volunteers to go on to the Surface, ahead of me!" The chiefs were silent. Even they, themselves, would not be willing to face the Surface alone, though they would have cheerfully 'died following Tumithak.

#### The Leader of the Scouts

THE Shelk-slayer waited a moment and then spoke:
"You see? It is clear that I must lead the scouts.
And for the same reason it must be the chiefs the leaders that make up this party of scouts. It is from you my council that I must call for volunteers."

Instantly a dozen swords were thrust out, hilt first, toward Tumithak. Every member of the council willingly agreed to follow the Shelk-slayer, where not one had been willing to precede him. Tumithak hesitated and then picked out three men. Nikadur he chose, his boyhood companion, for he felt he knew this Loorian so well, that he could anticipate his reaction to any event. Then, too, Nikadur was an accomplished archer, and possessed the only weapon known to the pit-men that could slay at a distance. Datto he chose, and this

for the Yakran's hard, practical sense and unfailing courage, as well as for his immense, untiring strength. And lastly he chose Thorpf, the nephew of Datto, for the same reasons that he chose the Yakran chief.

So, a few hours later, these four were moving up the narrow, black-walled corridor, swords in hand and packs on their backs; while behind them, the army, in charge of Tumlook and Nennapuss, waited anxiously for their return.

#### The Approach to the Surface

THEY came to the narrow flight of stairs, ascended it, and saw in the distance the opening that was the entrance to the Surface. But to Tumithak's surprise, no reddish light appeared, as it had on his previous visit. In fact no light at all shone down into the hall from the Surface! Tumithak was puzzled. He motioned the other three to wait there, and then crept softly to the opening that was the goal of the long trek through the corridors. Cautiously, the slayer of the shelk raised his eyes above the level of the pit and looked about him. It was true, as he had thought, all the Surface was in darkness! He felt a pang of fear. Had the shelks discovered the approach of his men and somehow plunged the Surface into darkness, he wondered. Were they even now in hiding, waiting for the men of the lower collidors to emerge, that they might slaughter them?

Involuntarily, Tumithak drew back into the corridor and there he stood, lashing his failing courage. Once again, as in the days when he had come this way alone, his cold, fanatic reasoning overcame his emotions, as he remembered that all the legends that he had ever heard of the shelks told of their hatred of the dark. Indeed, his wonderbook, that manuscript that he had found when a boy, had told him that the shelks had originally come from a land where there was never darkness and that story—combined with the vague legends of his tribe which said that no shelk would ever, from choice, do battle in the dark—convinced him that the darkness could not be of the shelk's contriving.

So, once again he returned to the pit, and, greatly daring, leapt out of it and stood upon the Surface!

#### The Great Darkness and the Stars

AFTER a short while, it seemed as if his eyes began to adapt themselves to the darkness, and faintly he could see certain forms in the distance. The trees, those pillars whose tops were covered with strange green billows, he could see as dense black blobs against a background only slightly less dark. A few hundred feet away and directly in front of him, rose the homes of the shelks, obelisk-like towers, leaning at crazy angles, silhouetted against the sky. And, looking up into the sky, Tumithak was amazed to see that that ceiling, as he thought it, was covered with hundreds, yes, thousands of tiny pin-points of brilliance, twinkling and glittering unceasingly, yet giving off so little light

that the dense darkness could hardly be said to be diminished at all by them.

For some time the Loorian stood there and then, as nothing happened to disturb the stillness and calm of the night, he returned to the pit and called to his friends. In a few minutes Datto emerged from the pit, closely followed by Thorpf and Nikadur. They looked around them, obviously worried by the darkness, but afraid to ask questions, for fear that the sound of their voices might betray them. So they stood, awaiting an order from Tumithak, until in sudden decision, the Shelk-slayer fell on his face and began to crawl slowly in the direction of the towers of the shelks, motioning them, as he did so, to do likewise.

The trip to the towers took some time, for the slightest whisper of wind in the trees would frighten the pit-men and cause them to lie motionless for many minutes at a time, but at last they arose and stood in the shadow of one of the towers. They were panting, not so much with the exertion of wallowing through the grass, as with the realization of the frightful danger they were facing, but after many minutes of tense listening, they grew bold enough to look around and take an interest in their surroundings. It was a strange building in whose shadow they found themselves, composed of some strong metal that was strange to the pitmen; a four-sided building that rose nearly-a hundred feet high-and was not more than fifteen feet square at the base. And it leaned at an angle of nearly twenty-five degrees in the direction from which the men had come. Towering over them, it seemed that at any moment it must fall and crush them, yet when they looked at its firm strong base, they realized that it might stand thus for centuries.

Having come this far, the waning courage of the men of the pit forbade their penetrating further into the town of the shelks, and so, undecided, they stood for many minutes, wondering what to do next. And though they stood in utter silence for long, in all that time they heard no sound of shelk, nor did they see a moving form.

But at last, Nikadur spoke softly in Tumithak's ear. "Something is happening to the wall of the Surface on our right, Tumithak," he breathed. "It seems to be giving off a faint light."

#### Light on the Surface

T UMITHAK started. It was true! A faint, uneven light dimly shone in the sky at his right. Even as he gazed at it, he realized that the glow was penetrating all over the Surface. He could distinguish the faces of his comrades and make out details on the ground! And Datto and Thopf were commenting softly on the amazing wonder of the trees, which were now sufficiently visible to be distinguished separately.

Tumithak addressed his comrades: "The light is returning, or another is being prepared. It is strange, for it is in the opposite side of the Surface from the light which I saw when I came here before." "Soon it will be light enough for the shelks to be about," whispered Datto. "Had we better retire to the pit, Tumithak?"

The Loorian was about to reply in the affirmative when Thopf gave a gasp and, trembling violently, pointed to a spot under the trees beyond the pit. There, faint forms were visible, moving toward the towers, and to them from the distance came the sound of clacking voices! A group of shelks were moving toward them!

In a moment, the terrible fear that was almost instinctive in man had seized the four. Panic-stricken, they looked about them for some means of flight. To return to the pit was impossible-already the group of spider-like creatures had passed it. To attempt to flee to the trees on either side was equally impossible-they could not fail to be seen almost immediately. But a single direction offered possible protection, and the hair of all four rose at the thought of taking that direction. Yet if they did not do so, and at once, discovery would be inevitable in another minute, so they fled around the side of the tower, further into the shelkcity, intent only on avoiding the present evil, and leaving the future to take came of itself. Even as they did so, rustling noises and here and there a clacking voice, told them that the city was beginning to awake. Utterly beside themselves with fear, they hugged the walls of the tower-and then, suddenly there was a door before them, an old, badly delapidated wooden door, and Tumithak had pushed it open and was hustling them into the interior of the tower.

Had there been an enemy within, he might have easily slain them as they entered, for the transition from the rapidly increasing light without to the dismal interior gloom made the room seem dark as Erebus. But before long, their eyes adjusted themselves and soon they could distinguish faintly the details of the tower. And great was their belief as they realized that this could hardly be one of the inhabited homes of their enemies.

#### The Web of Ropes in the Tower

HE floor was uncovered, just bare earth, queer, 1 thickly packed dust that covered all the floor of the Surface; and there was no furniture of any description visible, unless a pile of straw in one corner might pass as a bed of sorts. But here and there about the room hung ancient frayed ropes, and looking aloft. Tumithak could notice dimly that these ropes led up to where, about twenty feet above, a great mass of twisted cables, ropes and cords crossed and recrossed the entire interior of the tower. It was a veritable nest of ropes, a web, he thought, as the similarity of the shelks to spiders again came to him. And, indeed, he was not far from wrong, for the shelks used the towers only as sleeping quarters and, at night, retired to the upper parts of them, where, in a bed made of hundreds of cables and ropes hanging criss-crossed from the sides, they slumbered the dark hours away. Fortunately, this tower in which Tumithak and his companions found

themselves was an old one, no longer considered fit for occupancy by the builders, and the use to which they now put it, we shall soon see.

The frightened pit-men stood for several minutes in the narrow confines of the tower, and their hearts were just beginning to again take up their normal beat when once more there came the ominous clacking voice of a shelk, this time almost without the door. It grew louder and the men knew suddenly, without a doubt, that the shelks were approaching this tower! They glanced wildly about them for a place of concealment, but even as they looked they knew there could be but one, and an attempt to hide in the maze of ropes and cables above the small room on the ground seemed tantamount to voluntary surrender. Nevertheless, no other alternative was possible, so in a moment, they were scrambling up the ropes and losing themselves in the thick maze of twisted cords and cables above. The criss-crossed ropes were not numerous near the ground, but some ten feet beyond where they began, they were so thickly placed that it would have been impossible to detect anyone hiding in them, from below. So here the adventurers halted their climb, and reclining in the thick web, lay listening to the sounds that were now immediately without the door. Indeed, by parting the ropes that concealed him, Tumithak found that he had an almost unhindered view of the floor beneath. That they had not concealed themselves a moment too soon was evidenced by the fact that hardly were they comfortably fixed among the ropes when the door was opened and a strange party came into view.

#### CHAPTER II

#### The Hounds of Hun-Pna

A SHELK was the first to enter and Tumithak felt the ropes, on which he and his companions lay, shake as the other pit-men trembled with fear at this, their first sight of one of the savage beasts from Venus. The creature was a fair representative of its kind; about four feet high, and ten long spider-like limbs and a head that, save for the fact that it was hairless and noseless, might have been that of a man. Held high in two of its limbs, as a man might hold a roug between thumb and forefinger, this shelk held a rod of metal, the tip of which glowed with a brilliant light. On its back was a queer-looking box, from which a hose emerged that was coiled up and ended in a long rod that was set into a sort of scabbard fastened on the box.

Following him came another, that might have been hiwin, and bringing up the rear of this strange party were two men! And the strangeness of these men made the party above gasp with astonishment. The guen were tall, taller even than Tumithak; in fact, the larger of the two must have been nearly seven feet in height. It was not their height though which astonished Tumithak and his friends; it was their incredible thinness and the savage look on their faces. Their legs and

arms were long and stringy; their thighs, indeed, being little bigger around than Tumithak's arm. Their waists, too, were surprisingly narrow, their necks were lean; but their chests were enormous, as were their hands. Not that all these members were out of proportion, no, there was something about them that made one feel that for certain purposes, these men might be better proportioned than even Datto, that colossus of the corridors. But, in comparing the two, it would be evident that these men were of another race, just as it had been clear that the Esthetts were. If one should compare a picture of those ancient dogs of the Golden Age which were called greyhounds with our dogs of today, one would be able to understand the difference between the men of the corridors and these creatures of the shelks.

#### Tlot and Trak

THESE men were clad only in a single garment, a cloth wrapped around their middle and dropping to their knees; but over this cloth a belt was strapped, and from this belt dangled a sword. In their hands, each held a vicious looking whip made from the hide of some animal; and, as if all this were not enough to distinguish them, their hair and their luxurious beards were black! The pit-men, who had never seen hair of any other color than their own fiery red (save the yellow of the Esthetts), would not have been more surprised if their hair had been green.

These men followed the shelks into the room and at once cast themselves down on the beds of straw. The shelks muttered something to them in a low clacking whisper, and then, extinguishing their lights, they turned and left the tower. The men remained, lying on the straw in a manner that clearly indicated fatigue. After a moment, one of them spoke languidly.

"I have seen real hunts in Kaymak, Tlot," he said, and there was a decided sneer in his voice. "I have known the time when three and even four of the wild ones would be bagged before night fell. You should see some of those hunts in the great city, Tlot."

The man called Tlot grunted.

"When you see a hunt in Shawm Trak, you know that you are really flushing a wild one. Those so called wild ones that you hunt in Kaymak are domesticated, and bred for the purpose, and you know it."

Trak looked crestfallen and turning to his bed, produced a small jug from within the straw. He poured some oil from it into his hand and began to oil his whip. Presently he made bold to speak again.

"Not for nothing is Hun-Pna called the cautious one," he remarked. "Never have I seen a hunter proceed with such caution. One might almost think that he expected one of the wild ones to turn and kill us. We might have brought down that one we pursued and reached Shawm before dark last night, had it not been that he feared to let us out."

Tlot sat up in his straw, and looked across at his companion. It was obvious that he shared the other's

opinion of the shelk that was their lord and master.

"When you have belonged to Hun-Pna as long as I have," he stated, "you will be more used to his ways." He rummaged in the straw, pulled out another larger jug, and after drinking from it noisily, went on: "I have seen him give up a chase and call us off after hours of pursuit, because the wild one showed fight when cornered!"

"Why, they always show fight when cornered, don't they?" asked Trak, who was evidently the younger man and deferred to the other's knowledge.

"Only about one in five really fights," answered the older one. "The others struggle weakly, but make no defense worth worrying about. They have sense enough to know that, if they showed signs of defeating us, the shelks would immediately finish them."

The speakers were silent again, for a while, and above them, four silent watchers wondered in perplexity over what they had heard. Presently the older man spoke again: "But I have seen quite pretty vicious battles put up by some of the wild ones. The women of the Tains are notoriouis for their fury. I am reminded of a hunt which I had about two years ago. That was the hardest battle I ever did have. It was a woman, too. But she didn't get away, like this one did, yesterday. Her scalp is decorating Hun-Pna's tower, right now."

Tlot looked interested.

"Tell me about it," he suggested.

#### A Great Hunt

"ELL," began the other, and there was a certain boastfulness about his manner that infuriated the pit-men who were listening from above, "You see, Hun-Pha was having a great feast to celebrate the Conjunction, and half the shelks in Shawn were invited. Nearly a hundred shelks were there, even old Hakh-Klotta himself; and, of course, one of the main features of the feast was to be the sacrifice to the mother planet. They don't sacrifice Esthetts at the Conjunction Ceremonies as I suppose you know, and so we were taken out to see if we could get some wild ones alive.

"Well we decided to look for Tains; Hun-Pna always hunts Tains because their corridors are so near the Surface. To go down into some of the deeper corridors, would be too much like risking his head, to suit the cautious one. He just drove us into the entrance to the pit and sat down to wait until we flushed some of the wild ones and chased them out to him.

"So I, with two other Mogs, started down into the corridors of the Tains. I had a sword, of course, and my whip and so had each of the others, for that is plenty of protection against a Tain. They're smart, the Tains are; but they're a fraid of their own shadows.

"Well, it wasn't long before one of the other Mogs had spied a Tain and soon had him running to the Surface, and just as they disappeared up the corridor, I ran across a woman with a baby in her arms. Now, that was some find, as you'll agree; the shelks are always pleased to have you capture a live cub. So I bore down on her, expecting to find her an easy prey, but she turned on me like a wolf. She had a club in her hand, and before I could raise my whip, she had struck me a dizzying blow on the neck and was off in a flash, running toward the Surface. She must have been beside herself with fright or she would never have taken that route, for there wasn't a side passage or a branching corridor, all the way to the Surface. I was stunned by her blow, and stood for a moment. gathering my wits, before I took after her.

"I followed her, without hurrying greatly, to the entrance. I expected the shelks would seize her the minute she appeared, but unfortunately they were busy with the male Tain that the other Mog had flushed; and when I reached the open, I saw, to my dismay, that she had cleared the crowd and was running like mad into the forest. I shouted to Hun-Pna for help, and dashed in pursuit, never once glancing back to see if they were following. Naturally, I supposed they were.

"Well, the Tain had quite a start on me, and you know how hilly and stony it is in the neighborhood of the Tain's pit. So it was that even my legs refused to carry me fast enough to catch up with her until she began to get winded. But at last she threw herself down by a rock on the hillside and faced me, snarling viciously. I approached her with care, for I still remembered that I must catch her alive, if possible. I turned to see how far behind the shelks were, and to my surprise, I found they were nowhere in sight! For a moment, I began to fear that I must give up my quarry, for none of us are used to fighting without a shelk at our back, you know, but at last I made a bold decision. I would attack and conquer this Tain singlehanded. And so I approached her as diplomatically as possible.

#### The Single-Handed Attempt to Capture the Tain and Her Baby

S HE stood there panting with fatigue and still clinging to her baby and as I approached her she began to swing her club about her in circles.

"'Give up, you fool,' I said, 'I'm not going to kill you. I want to take you alive.'

"'Alive!' she sneered. 'For what purpose? Mate or meat?"

"I didn't answer. What was the use? I wouldn't mate with one of those wild ones, if I died for not doing it, and if I told her I wanted her for the sacrifice, that wouldn't help any. So I lashed out with my whip, and the battle was on.

"And it was a battle, too! As we struggled there, minute after minute, I took more than one blow from that infernal club of hers, while she was a mass of blood from where my whip had cut her skin. At last an idea came to me, and I began to direct the blows

of my whip not at her but at her child! After that, it seemed that my victory was going to be an easy one. She was so taken up with protecting her child that she had not time to devote to hurring me. Presently she began to sob, and to curse me. Said I was a demon, and that I didn't deserve the name of man. You know what I mean, you've heard the wild ones give the same kind of talk. Well, that sort of stuff has never bothered me. I was born a Mog, and a Mog I'll die. But I lamey, when she began that, that she had almost reached the breaking point, and I began to have new hopes of bringing in the mother and the baby, both of them alive.

#### The Death of the Baby and Its Mother

"B UT just as I expected her to cower down and give in, she suddenly shouted 'No!"—and raising the child over her head, she dashed it to the ground and brained it with a club. Then she rushed at me in a fury, clawing, biting and spitting, until in sheer self-defense. I was forced to use the sword on her.

"I returned with nothing to show for my hunt but the scalp of the woman, but Hun-Pna hung it up among his trophies and it's there yet."

The speaker was silent at last, and, pulling some straw over him, apparently prepared himself for a nap. The other man, after a moment evidently decided to follow his example, but his preparations were rudely interrupted by the decision that had been reached by the pit-men in the ropes above.

While this gruesome tale was being related, the watchers had listened in horror. That men could exist, so low and base as to hunt their own kind for the pleasure of the shelks, had never entered their heads. They had been prepared for the fact of the existence of the Esthetts by the story that Tumithak had told them, but here was a race of shelk-worshippers even lower in the scale of humanity than were the Esthetts!

As the tale progressed, the horror of these creatures grew in the minds of Tumithak and his companions, and as Tlot finished his story, the same thought showed clearly in the eyes of each of them. These creatures had surely lived far too long, they felt. Black, unreasoning anger choked the pit-men, and without a word, with only a questioning look from Datto and Thopf and an affirmative nod from Tumithak, the four dropped suddenly to the ground in front of the astonished Mogs, intent on bringing an end to their foul existence.

There is no doubt but that the continued victories that had attended the men in the corridors had made them over-confident. The savages of the dark corridors had capitulated to the force of their arms, the Eshtetts had succumbed without a struggle, and in the minds of the four was the idea that this would not be so much a battle as an execution. With the advantage of four to two and the added fact that the attack was a surprise they expected to dispatch the Mogs on the instant. But once on the ground, it took but a matter

of seconds for them to realize their error. Almost before they knew it, the Mogs were standing back to back; swords in hand, were defending themselves so valiantly that the outcome of the battle seemed for a moment in doubt. And as they fought, the Mogs shouted—shouted loudly for their masters to come and help them!

#### The Folly of the Attack on the Mogs

T UMITHAK realized the folly of their attack almost as soon as it was accomplished, yet even in the realization, he could not help but feel that somehow they were justified. And, if they could but slay the Mogs, their lives would not be sacrificed in vain.

One of the tall, black haired creatures was down now, and Thopf pounced upon him and finished him with a vicious thrust at his throat; but in the brief moment that the attention of the other two was diverted by this, the other Mog turned and sped like a deer past Datto and out the door, still bellowing for the shelks.

Datto roared with anger and would have sped after him, but Tumithak laid a restraining hand on his shoulder.

"Quick, Datto, we must hide again!" he whispered excitedly. "Up the ropes! Quickly!"

Without an instant's hesitation, Nikadur leaped for the ropes and began to climb, and the other three immediately followed his example. Without, the clickings and clatterings of shelk-talk were rising higher and the Loorians were hardly well-concealed by the strands of cables when the Mog rushed into the room, followed closely by a group of shelks. The creatures were all armed, each carrying the box and hose such as the shelk had worn, which had entered before. Only now the long, queer nozzle had been removed from the scabbard and was carried in two of the limbs.

The shelks looked about them in amazement for a moment, and then one of them pointed aloft. The pitmen had not ceased their climbing, apparently the web of ropes continued to the top of the tower, and so they climbed on, intent only on getting as far as possible from the savage masters of the Surface. But escape was utterly impossible, they felt, and what tiny grains of hope remained to them was lost when two of the shelks sheathed their weapons and with incredible agility began to follow them up the ropes.

Above, the four desperate pit-men could see little to do but to continue their hopeless climbing and to pray for some miraculous means of escape. Nikadur continued to be in the lead, closely followed by the agile Tumithak; but the great bulks of Datto and his huge nephew were handicaps to them and they were soon several feet below the Lororians.

The mazy web of ropes and cables became thicker and thicker as the men ascended, until it was impossible to see the ground; but the sounds from below left no doubt that the shelks were rapidly drawing nearer. Suddenly there was a cry from below Tumithak—a human cry, a cry of agony. And then there was a wild thrashing, a sound of bodies tumbling through the ropes and a crash! Tumithak looked back, but the thick tangle of ropes obscured his view, until they suddenly parted and Datto's fierce face appeared, its deadly pallor contrasting oddly with the red of his beard and hair.

#### Thoof and the Shelks

"THOPF!" he cried, in agonized tones, "They've got him, Tumithak, my nephew, Thopf! It was he who fell. They leaped upon him and tried to tear at his neck with their infernal fangs! He struck back, but he lost his hold and fell. But he took them with him! He took them with him! He took them only shelk-slayer now, O Lord of Loor!

The huge Yakran was weeping as he climbed, for his nephew had meant much to him and would have been his successor as Lord of Yakra. Tumithak, too, felt an ache in his heart at the realization that Thopf was gone, but he made no answer to Datto, reserving all of his remaining breath for the climb. And then, Nikadur, who had been lost to sight in the web above, gave a cry and momentarily, Tumithak's heart sank in increased despair. Was he to lose this friend, not? \*Had the shelks somehow attacked them from above? He hastened his climbing, wondering if he would reach his friend in time to aid him.

He parted the ropes above him, climbed higher, and, saw a dim light filtering down through the web. A moment later and Nikadur's form came into view, dimly against this new light. The light shone from one of the walls, and as Tumithak drew himself up beside his friend he saw the reason for his cry.

The light came from a small circular window set in the very top of the tower, and Nikadur had cried out involuntarily as he had looked our and beheld his first view of the Surface in the full light of day. As Tumithak raised his eyes to the level of the window's ledge, it was all that he could do to keep from crying out himself.

The little window looked down upon the shelk city, and from its ledge a cluster of strong ropes hung. The other end of each rope was fastened to the window of another tower; apparently the shelks used these ropes to go from tower to tower without returning to the ground. Below, Tumithak could see the bases of the other towers, and an ever-increasing crowd of shelks, with here and there a lean, hairy-faced Mog.

It was not the crowd below, nor the connecting cables, not even the vast view from the window that had caused Nikadur to cry out in surprise, however. It was his first view of the sun! Even in his desperate straits, that object had been the thing that most impressed him as he looked for the first time on the fully lighted Surface of the earth. And indeed, Tumithak, who had seen the sun before, was hardly less surprised. For the sun he had seen before had been a dully glowing ball of red, setting in the west, while this

great orb, dazzling in its intense, white brilliance, hung in the exact opposite side of the heavens. For a moment, he was puzzled, but he quickly thrust his amazement to the back of his mind, and strove to concentrate on some means of escape.

The metal walls that fell away from the window's ledge were as smooth as the brown glassy walls of his own home corridor—there was no chance of escape there. Indeed, could he have clambered down the side of the tower, it would have availed nothing, for the crowd of shelks below had by now grown to such proportions as to cover the ground, and Tumithak could see them pointing and gesticulating, exactly as a crowd of humans would do under similar circumstances.

#### Datto Joins the Other Two

D ATTO suddenly drew himself up between the two Loorians, leaning his huge form upon the ledge of the window. His eyes were still filled with the tears that had sprung into them at the death of Thopf, but he spoke nothing now of his grief. His mind, too, was filled with the problem of escape.

"They are coming Thumithak," he said. "Other shelks are coming up through the ropes. What shall

we do now? Turn and fight them?"

The Loorian's heart felt a glow as he realized Datto's will read the shelks. This was one man, at least, who had learned the lesson that Tumithak had preached so long and earnestly to the pit-men. He shook his head at Datto's proposal, however, and continued to look out of the window. There did seem one course of escape left, but so small was it that Tumithak was loath to suggest it. At last, however, he heard sounds not far beneath him, and knowing that the pursuing shelks would soon reach the window, he determined to put his desperate plan into execution.

The far ends of the cables that hung from the window ledge, extended to towers that were, most of them, inhabited. Tumithak could see the faces of shelks at the windows, and in one, even, the hairy face of a Mog was visible. But two of the windows were empty and toward the nearer of these, Tumithak pointed.

"It is our only chance," he said, and tried to conceal the despair in his voice. "It is a slim chance, but perhaps we can get across and escape some way out of that other tower."

Nikadur, who held the best position at the window, seized upon the idea at once and, climbing into the window's opening, swung out upon the cable. Hand over hand he passed out on the rope, and Tumithak motioned to Datto to follow him. The big Yakran shook his head.

"This is no time for heroics, Lord of Loor," he said. "The lower corridors need you far more than me. The chances are slim enough for escape, now, without increasing them. Go you, and I will follow and guard from the rear."

This arrangement was hardly to Tumithak's liking and for a moment, he felt inclined to argue, but the increasing danger made him realize that time was precious and so he took his place at the window and followed Nikadur hand over hand across the cable.

#### The Escape from the Tower-Datto's Sacrifice

TUMITHAK gave one look down as he swung apelike along the rope but the vertigo that immediately resulted caused him to look hastily upward again. He found himself not far behind Nikadur and hesitated in his crawling pace long enough to look back to see if Datto was following him. The sight he saw in the brief glimpse he had was something that remained in his memories for years.

The shelks had arrived at the window's opening and Datto had been forced to turn and face them. As Tumithak looked, he saw the huge chief of Yakra, with one shelk clawing desperately at him from behind, pick up another and hurl him, clattering and squeaking from the window. Then he drew his sword and called to Tumithak.

"They have me, Tumithak," he cried, "I can't hold them off. There are many——" he hesitated and then, as if an idea had suddenly occurred to him: "Hold fast the rope, Tumithak!"

The Loorian chief gazed in puzzled despair as Datto swung his sword. Again the Yakran cried: "Hold fast the rope!" and then the blade struck down the cable, half severing it. Fearful, at a loss to understand Datto's reason for his actions, Tumithak gripped the cable even tighter, and then the sword struck again, cleanly cutting the cable from its fastening at the window.

Tumithak caught a single glimpse of Datto being jerked back into the tower, even as he struck; and then the Loorians were falling away from the tower. Nothing but death was in Tumithak's mind, yet some inward instinct made him obey Datto's last command and cling like grim' death to the rope. He saw the ground approaching with terrible swiftness, saw that they were swinging toward the tower to which the other end of the cable was fastened; and then there was a terrific jolt, and beyond, he heard Nikadur scream fearfully. The rope had swung past the leaning tower, its end, weighted with the Loorians, acting as a huge pendulum and then the ground, which had approached with sickening closeness, was dropping away again!

Dimly conscious that they had somehow escaped death, the two had hardly realized it when Tumithak's precarious grip on the rope began to slip. He grabbed at the nearest object, which happened to be Nikadur's leg; heard his companion scream again, and then they were turning over and over in the air, to land, a second later, in the branches of a huge tree that stood beyond the group of towers.

#### Their Landing

D AZED and bruised though they were by the fall, the Loorians, nevertheless, hesitated not a moment in taking advantage of the opportunity for escape that

had come to them. Instantly they were tumbling through the leafy branches, and although Tumithak wondered vaguely at the strange object in which he found himself, the fact that it was not inimical was sufficient to enable him to ignore it and to focus his attention on the business of fleeing from his enemies.

That the shelks had been amazed by the quick succession of events was obvious from the fact that they did not at once attempt pursuit. The Loorians were out of the tree, in fact, before the cries and clatters from the towers told them that the shelks had organized a pursuit. They looked about them, vainly hoping to spy their own pit, but it was far to the right, and hidden by the trees; so, calling to Nikadur to follow him, Tumithak plunged deeper into the forest, away from Shawm.

Breathless, bruised, with the brave thoughts of conquest utterly driven from their minds, like rabbits through the brush the two pit-men fled, while behind them, ever louder, sounded the tumult of the pursuit.

#### CHAPTER III

#### Tholura the Tain

It is hard for a writer of the present age to attempt to reproduce the thoughts that passed through the heads of the Loorians as they fled in hopeless panic through the woods. Three thousand years separate those heroes from the world of today, years of almost continued change and progress, and, in the safe, almost uneventful life that we lead, there is little to enable us to reproduce their overwhelming emotions. We can, of course, easily understand that fear, black, unreasoning fear, such as comes to us sometimes in nightmares, was probably uppermost in their minds. But there must have been other sensations, other feelings, too.

What, for instance, did they think of the trees that rose around them in such abundance? Strange forms of life, indeed, these must have been to those creatures of the underworld, in whose lives there had never been so much as a legend of vegetation. What did they think of the frightened cries of the birds, or of the sudden appearance, perhaps, of a rabbit, startled by their crashing flight? What would their reaction be to the sight of a brook or a thicket of brambles that clutched and tore at their clothes? Or to the great round sun that shone through the trees, glowing ever brighter and rising ever higher over their heads? We can well imagine that all these made but little impression on the Loorians in their flight, but that they had some effect was undeniable. And rising over all the tumbled thoughts of their minds were the sounds of the pursuing shelks, ever growing closer.

It was fortunate, indeed, for the Loorians that the shelks were too amazed to follow them quickly. By the time that the party of pursuit was organized the pitmen were lost in the deeply-wooded section just beyond the edge of the town and it was fully five minutes before the Mogs, which the shelks called out, had picked up their trail and started after them. By this time Tumithak and his companion had climbed the stony, gradually rising hillside that rose in front of them and were descending down the other side.

They fled in the last stages of terror, fled without thinking, the one idea in their minds was to put as much distance as possible between themselves and the town of their enemies. The trees thinned out on this side of the hill, but as they descended, it became increasingly difficult to make any progress, due to the tall grasses and bushes which grew here. Had they known the contour of the country, they would have realized that they were now in the valley of a broad shallow river that flowed not far from Shawm. This river was normally but a few hundred feet wide and several feet deep, but the spring rains had come and for a few days it would be a tumbling, turgid torrent that cut a deep curve through the valley on its way to the sea.

Toward this stream the Loorians were speeding, and before long, they dashed into the thick growth of willows and alders that grew along its banks, hoping against hope that the dense vegetation would conceal them from their pursuers.

#### The Fugitives Are Seen

As they entered the brush, Tumithak was bold enough to cast a hurried glance behind him. Far up the hill, he could see the pursuing party already rising over the top and rushing down into the valley. There were at least a dozen shelks, the majority of which carried the strange boxes with the hoses attached, and in the forepart of the band, he saw a group of the hairy-faced hunting men, the Moga.

Even as he looked, one of the Mogs spied him, and with a hoarse bellow, called the attention of the others to the quarry.

Despair was in Tumithal's heart, for never, since he had begun his adventuring, had the Loorian been in such a dangerous predicament as this. And had you told him that the situation could be worse, he would not have believed it. Yet even as he turned and plunged into the deep thicket of willows, he heard Nikadur, ahead of him, give a cry of startled dismay! He pushed hurriedly forward, wondering what new disaster had befallen, and saw that his companion had stopped his flight. Stopped because he had come to the brink of the river and could go no farther!

To the despairing men of the corridors, this was the last straw. The two saw no escape at all, for the river swung in a curve around the point on which they stood, and there was no possibility of fleeing to either the right or the left. And at their back, they could hear the bellowing of the Mogs and the strange, inhuman voices of the shelks.

Never, in all man's history, was there a time when the phrase "between the devil and the deep sea" was more truly applicable.

#### On the River's Edge

LIKE some small animal cornered at last by a beast bis face in his arms. Tumithak would have given anything for the ability to surrender and feel the relief of utter resignation which he knew that Nikadur felt, but some inner part of him urged him to die fighting. He drew his pistol, with the three precious bullets that still remained from the day when he had slain his shelk; in his mind the consoling thought that if he must die, at least he could die fighting the enemies of man, an honor not often accorded to a Loorian.

Had the two but known it, though, neither was destined to die in this way for many long years. For several days before they arrived at this spot, Nature had been preparing the way for their escape; for the spot on which they stood was a few feet above the level of the river, it was a high, crumbling bank and the waters of the spring flood had washed away at it until the spot on which the two stood overhung the water by several feet. The added weight of the Lorians had weakened it until the slightest jar would be sufficient to break it off and hurl it into the flood. And even as they stood there, as the shelks and their hunting men began to push through the thicket to take them a huge log that had been caught in an eddy and swept shoreward, struck the bank a resounding thump -and the work of erosion was completed! Tumithak felt the ground dropping suddenly from beneath his feet; the whole world, it seemed, rocked crazily about him; and then he had splashed into the icy-cold water and was gasping and struggling and apparently certain of drowning. He still held his pistol with a deadly grip, some strange, sublimated idea of self-preservation causing him to cling to it tightly through all the strange events that followed.

#### In the Icy Cold Water

WHEN Tumithak rose to the surface of the water after that first chilling splash, his arms struck out in an instinctive attempt to keep from sinking. He knew nothing of swimming, in fact in all his life he had never before seen enough water to swim in, but some deep instinct caused him to thrash about, and in so doing his hand struck the log which had been the cause of his sudden advent into this amazing world of water. He grasped the log, threw an arm over it, and drew himself up on it. The hand that held his pistol struck a wet red-haired head and to his surprise, his eyes met the pallid, fear-stricken face of Nikadur, who had apparently managed to seize the log and raise himself to the other side.

By the time the two Loorians had ceased to gasp and sputter and had gained sufficient control of themselves to take notice of their surroundings, they found that the log had left the eddy into which it had drifted and was again floating down the stream and getting farther from the shore every minute. For a moment, hope rose in their breast—they were no longer in immediate danger of death from the shelks—but a brief reflection made them realize that they were no better off here; indeed, what might have been sudden, merciful extinction now threatened to be a death that was long and lingering. Yet they continued to cling to the log desperately, though it was only the instinct of self-preservation that kept them fighting at all.

They watched the shore with apathetic eyes as they were washed farther and farther away from it, and when they had almost reached the center of the stream, Nikadur gave an inarticulate cry and pointed to the spot where they had been precipitated into the water. The shelks had emerged from the thicket and stood in amazement, wondering where the pit-men had gone. Presently a Mog spied them and shouted the news to his masters. Tumithak saw the shelks unlimber the strange hoses with the long nozzles and point them in his direction. Little spurts of steam leaped from the water about a dozen yards from him but apparently the range was already too great for the weapons to do much harm. Once, indeed, he felt a fiery breath, as though from a furnace, beat upon his face, but it was no more than a passing discomfort, and, shortly after, the shelks gave up their attempt and stood watching until the Loorians had disappeared around the bend in the river.

#### The Escape

A S they continued to be washed along in the main current, the Loorians found time to look about them and to observe the amazing details of this new world in which they found themselves. The current was fairly swift; yet as they moved along with it, its swiftness was not noticeable to them; in fact, the only discomfort they felt was the gradually increasing fatigue in their arms. They watched the shore, marvelling at the trees and bushes that seemed to stretch endlessly along the banks, and wondering how they would ever be able to find a way through their seeming impenetrability, if they should win to the shore. They gazed at the sky, and were amazed at the clouds, which they were now able to study for the first time. And most of all, they were amazed at the sun, which by this time had reached the zenith, leaving no doubt in their minds that this astounding light of the Surface really did move slowly across the sky.

An hour passed, and still the pit-men were floating down the river with the floating log, and still the problem of reaching the shore was as unsolved as ever. Tumithak had attempted to climb up on the log and sit astride it; but at his first attempt, he had almost lost his companion when the log suddenly turned, so he had abandoned the idea at once and now continued to cling with weary arms, as he had since he had first been precipitated into, the stream.

Another hour passed and with aching arms and water-soaked bodies, the Loorians were beginning to feel that even flight from the shelks might be preferred to this. Tumithak was beginning to wonder what would

happen if he let go the log when he felt his feet touch something, float off and then touch it again! He re-leased his grip on the log a little, and knew that it was the bottom of the river that he touched. The log had reached another huge bend in the stream, and unnoticed had approached the shore at a spot where a sand bank stretched out into the river. Tumithak cautiously released himself, sank slightly, and stood up to his neck in the water. He looked about him, and seeing the shore so near, let go of the log entirely and, calling out to Nikadur to do likewise, turned and waded to the shore. His companion followed his example, and in a few moments the two staggered across the sand-bar and fell, fatigued and water-worn, into the brush beyond.

#### On Land Again

O NCE concealed in the weeds and willows, they bent every effort to discern whether they were followed. They looked out over the broad river for long, and jumped with fright at every small sound that came from the woods behind them. But as time went on and no savage shelk appeared to slaughter them, nor did the clacking cries come to their ears, they at last decided that they had succeeded in evading their pursuers. Then it was that their over-taxed bodies began an insistent clamour for rest, and so, unable to resist further, they gave in to exhausted nature and in a few moments were asleep.

"The sleep of utter exhaustion" is a phrase that is often used to denote sound, undisturbable slumber. That afternoon, the Loorians were to learn what anyone who has ever been utterly exhausted can tell, that the sleep of an extremely tired person is anything but sound. Time and again, one or the other of the Loorians would start into wakefulness as some wood-sound startled them; time and again, their over-wrought nerves would tense, and they would find themselves sitting up and staring into the woods with throbbing alertness, and at last, toward evening, when they did begin to find some slumber, dream after nightmarish dream kept their minds in a turmoil. But rest came to them at last, and when the next morning came, it was a refreshed and vigorous Tumithak that opened his eyes and looked about upon the world which had recently shown him so much terror.

The sun was just rising and its light was reflected gloriously upon the swollen river; the birds were beginning to sing; and over Tumithal's head, the branches of a huge old pear tree showered down a million petals. A morning breeze was blowing, and rosy clouds scudded before it in the east; it was a perfect spring morning, but its beauty was lost upon Tumithalk, for his mind was taken up almost entirely with wondering which of these many things might prove to be inimical, and just when he might expect them to become dangerous. At last, he turned and awakened Nikadur. The latter sat up, looked about him and then sank down again in despair.

It Seemed Like a Dream of Terror

"I HAD thought it was all a dream, Tumithak," he said mournfully.

Tumithak smiled and shrugged his shoulders.

"Unfortunately it was not," he said half-bitterly.
"We are far from the safety of Loor, Nikadur."

He had removed the pack that was still strapped to his back as he spoke, and now he seated himself and removed from it a packet of food-cubes. He offered half of them to Nikadur, and for a while the two were silent as they partook of their simple breakfast, the first meal that they had eaten since emerging from the pit.

The meal finished, they fell to examining the details of the wonderful place in which they found themselves. The soil interested them most for a while, for they were unable to decide whether it was a thick coarse dust that had settled here or whether the original rock floor had crumbled and decayed. The question was abandoned, however, in the light of further mysteries; for wherever they looked they found new wonders to occupy their minds. A bird flew overhead, and although they were familiar with bats in the corridors, they wondered at the strangeness of this Surface creature, and at the perfection of its flight.

The flowers that were scattered in profusion through the woods excited their admiration now, but even as yet, they could not account for the fact that though these things certainly appeared to be living creatures, yet they were harmless and unable to move about. Twice they spied small animals, one of which fled from them, while the other peered curiously at them from a hole beneath a rock; but Tumithak had reached a point where he had some control of his fear, and he felt that he was at least the master of these small Surface creatures.

They had been examining this amazing world for over an hour when Nikadur voiced a thought that had

been bothering Tumithak for some time.

"How are we to get back to our corridors, Tumi-

"Have you given any thought to which way we must

Tumithak considered.

thak?" he asked.

"If we could walk in the direction from which we were carried by the hurrying of the water, we should find ourselves near enough to the shelk city to enable us to search for home. But perhaps the shelks are still seeking us. Do you feel that you could brave the dangers of Shawm again?"

## The Duty of the Pit-Men Waiting in the Hall of the Esthetts

N IKADUR trembled, but his answer showed Tumithak that the events of the past two days had somehow reviewed in Nikadur some trace of the ancient spirit of courage, for he answered bravely: "Nennapuss and our warriors wait in the Halls of the Esthetts. Is it not our duty to try to return to them?" The shelk-slayer smiled, and clapped his comrade on the back.

"Come then," he said, and they arose and started on their journey, keeping as close as they could to the banks of the river and praying that no new and unknown danger would confront them. They had not gone far, however, when it began to be increasingly evident that it would not be possible to follow the stream for long. The banks grew steeper and the vegetation grew denser and denser, until at last the Loorians gave up the attempt to remain close to the river, and struck off into the woods in the hope of finding a more open section. They had gone but a few dozen yards when they came to a well-marked trail leading in the very direction in which they wished to go. So ignorant were they of wood-craft or any similar art that the idea that this was a path made by the shelks never entered their heads. They at once turned into the path and continued on their way, sublimely unconscious of their increased danger.

For over a mile, they walked on without incident to distract their minds. A dozen times they congratulated themselves on the fortunate discovery of the path, and their hopes were beginning to run high that they might succeed in reaching their pit again, after all, when suddenly, as they topped a slow rise, they heard a distinct commotion in the little vale beyond. They at once darted into the brush, and froze into silence; then after a little while, they crawled slowly to the hill top and, lying there on their faces, looked upon an amazing scene.

#### A Fight Between Humans Watched by the Shelks

It was the scene of a battle—and just such a battle as they had heard described by Tlot, the Mog, when they had hidden in the ropes and cables of the shelk tower. There were seven figures in the little vale, three of which were shelks and four, humans. Three of the humans were Mogs, armed with short, heavy javelins not unlike the ancient Roman pilum; the other was a woman—a woman whose back was against the bole of a great tree, and who lashed out furiously at the Mogs with a long, needle-like sword that was, apparently quite capable of protecting her from the savage three. And the sight of three broken whips that lay at her feet showed that the battle had already occupied some time, and was evidence that the girl had been giving good account of herself.

The three shelks were taking no part in the fight; they stood well back and encouraged the Mogs with sardonic, clucking chatter. Two of them appeared to be unarmed, the other carried the now familiar box and hose, the long nozzle of which he held between two of his limbs, as a man might hold a pencil between the held between th

Behind the shelks was a queer vehicle, a long, narrow,

two-wheeled car that balanced strangely on its wheels, and that had a high, V-shaped transparent shield in front of it, behind which were a bewildering number of controls. Apparently the shelks and their attendant Mogs had been traveling some place in this car and had stopped long enough to enjoy the slaying of this girl.

## The Strange Vehicle—The Fight—The Arrow of Nikadur

T uMITHAK'S brief survey of the machine noted also a box that sat on the rear of the machine, a box with a number of white and shining rods of metal in it. These rods, it seemed, were made of a metal similar to that of the plates that illuminated the corridors. That they were not exactly the same was apparent from the fact that their light was not brilliant as was that of the plates, in fact, it was little more than a luminescence.

Tumithak's interest in the vehicle was but a passing one, just a single hurried glance, yet when his eyes returned to the fight, his heart leaped to his throat—for he saw that one of the Mogs had struck the girl's sword a particularly vicious blow, and before she could return to the defense, another Mog brought down his sword weapon, and then—There was a swish in the air, close to Tumithak's head, and before the Mog could finish his blow, he jerked violently forward and fell to the ground with an arrow in his heart!

Tumithak turned to see Nikadur, risen to his knees in the grass and already fitting another arrow to his bow. He comprehended instantly what his comrade had done, and chuckling in mingled amazement and delight at Nikadur's new-found courage, he drew his pistol and turned his face again to the battle. The shelks were filled with amazement at the sudden, unaccountable death of the hunting man, and the instant in which 'they stood in puzzled confusion had sufficed to give the Loorians that half second necessary to win. As Tumithak turned, he saw the armed shelk already raising his long-nozzled hose—and then to his surprise, the bushes to the right of him, at which the nozzle pointed, burst into flames!

#### The Marvelous Hose of the Dying Shelk

INSTANTLY Tumithak's pistol spat, and, miraculously enough, the bullet struck the shelk squarely in the body. It gave a peculiar cry, its limbs went limp, and it collapsed on the ground, the hose dropping from its grip. As the hose fell, Tumithak became aware of a marvelous thing. The hose's long nozzle, in falling, described a vertical circle, and wherever it pointed, the vegetation immediately burst into flames! To the left, and high in the trees swung the flaming path, over their heads and back beyond the shelks; and then, as the nozzle came to rest on the ground, a long streak of blackened earth appeared, starting at the nozzle's mouth and stretching away into the forest. Somewhere a huge branch, severed from its trunk by the heat ray, fell

crashing to the ground, and then Tumithak jerked his mind back to the scene of the battle, just as another of the shelks reached for the hose. Again Tumithak fired his revolver—and missed! He was about to fire his last remaining bullet when he again heard the twang of Nikadur's bow, and the second shelk fell to the ground, its limbs feebly twitching and attempting to claw at the arrow that had jerced its body.

Only two Mogs and a single shelk remained now, and the advantage was still with the Loorians. The remaining shelk made a dash for the weapon of its dead brother, but even as it did so, Tumithak and Nikadur, flushed with the fever of battle, dashed forward to prevent its reaching it. Halfway down the hill, both stopped to discharge their weapons, and when they reached their destination they found but a single Mog to oppose them. For the two hunting men had been so intent upon the battle with the girl that they had hardly been aware of the events going on behind them, and just as Tumithak and Nikadur reached the bottom of the hill, the girl, with a lucky stroke, had dispatched the second Mog and so the remaining one had turned to appeal to his masters. The sight of them stretched upon the ground was quite enough for the astounded Mog; with a howl, he abandoned the battle and fled.

Tunithak was at first inclined to let him go, but a second thought brought to him the memory of that other Mog who had escaped, in the shelk-tower in Shawn; and so he gave a quick order to Nikadur, and a swift arrow sped forward and overtook the hunting man, silenced his howling forever. Then the Loorians turned and approached the girl.

She still stood with her back to the tree, her chest was still rising and falling with the exertion of the battle, and her long hair, which was as black as that of any Mog, was tumbled about her shoulders and was damp with the perspiration brought out by the fight. Her dress was a long tunic, not unlike the belted dresses of the Loorian women, save that her people apparently possessed the secret of some dye, for its color was a brilliant blue. Tumithak felt that he had never before seen any woman with half the animation, half the determination shown by this strange girl. The shelk-slayer, Tumithak, approached her diffidently, for the first time in his life consciously bashful before a woman. He spoke not at all; in fact it was Nikadur who finally broke the silence.

#### Addressing the Girl in Friendship

"WE are friends," he said, and indeed, it was well that he said it, for the girl was holding her sword at the guard, uncertain of how she would be treated by these newcomers. At Nikadur's words, she lowered her sword slightly and relaxed her tense nose.

"Who are you?" she asked, and there was a touch of amazement in her voice. "Who are you who slay shelks and Mogs alike with strange weapons of thunder?"

Tumithak struck his chest importantly. He had fe-

gained his composure, and at the girl's words, that queer vanity of his again swelled within him.

"I am Tumithak, slayer of shelks!" he announced.
"Tumithak Lord of Loor chief of Yakra and Nonone,
Master of the Dark Corridors and of the Halls of the
Esthetts! I have come to the Surface to slay shelks,
and to teach Man to again battle for his ancient
heritage! This companion of mine is Nikadur—who
also slays shelks." and as he spoke, it seemed to dawn
on Tumithak for the first time that he was no longer
"The Shelk-slayer," that now this honor was one that
must be shared with his comrade. He turned to Nikadur and clasping him by the shoulders, kissed him on
the cheek.

"You, too, are a shelk-slayer now, old friend," he saw. 'Quick, take the heads, that we may show them to our friends, when we return to our corridors." And so, as Nikadur, obeying, turned and busied himself with the bodies of the shelks, Tumithak returned to the now friendly girl.

#### Tumithak and the Girl Now Friends-The Tains

"THESE places of which you speak," she said, as she thrust her sword through a ring at her belt, "I have never heard of them before. Can it be that you come from some other pit?"

This explanation seemed plausible enough for Tumithak, for never, in his own pit, had he seen anyone with hair colored as was this girl's. "I suppose you are right," he answered, "What do they call your pit, and what is your name?"

"I am Tholura the Tain, and my pit is the pit of the Tains," and the girl pointed to her throat, where a blue, six-pointed star was cleverly tattooed. "This is the mark of all the Tains," she said.

"But what are you doing on the Surface?" asked Tumithak. "Do your people often dare to come out on the Surface, and face the shelks?"

There was a world of scorn in the girl's voice as she replied.

"Never in my life have I heard of a Tain who would voluntarily face even a Mog," she replied. "The Tains are a race of rabbits! They cower in fear, deep in the lowest corridors of our pit, and when the shelks and foul Mogs come hunting them, they either flee in panic, or sacrifice one of their own people, that the rest may live."

"But you—" insisted Tumithak, "How did you have the courage to leave the pit? How do you happen to be on the Surface?"

"I do not know," Tholura answered, vaguely. "I have also seem a little different from the other Tains. It has seemed to me a most degrading thing to flee ever from one's enemies. Many of my people have thought me mad because I believed that it would be nobler to die than to flee. But even I never dreamed of venturing upon the Surface until three days ago, when a party of hunting Mogs raided our part of the corridors and slew my sister.

The Death of Tholura's Sister-Her Revenge

"TRIED to induce my father and my brothers to follow them for I felt sure that they could be overtaken before they left our pit. But like the craven cowards that all the Tains are they cowered in our apartment and told me I was mad to think of such a thing. Perhaps I was, for I took up my father's sword and turned my face toward the Surface vowing that I would follow and never return until I had taken vengeance on the murderers of my sister."

She paused as Nikadur drew near and threw the heads of the shelks at Tumithak's feet. She glanced at them for a moment in fascinated curvicisty and then with a little feminine grimace of disgust she turned her head and went on: "I pursued my way to the entrance of the pit but saw no more of the Mogs who had slain my sister. So I continued my way out to the Surface and to-day after wandering for a long, long way, I came upon this other party. I might have tried to avoid them, but they spied me before I could hide. So I faced them, hoping only that I might slay a Mog or two before I died.

"But I little dreamed that a hero existed who would not only prevent my slaughter/at the hands of the Mogs, but would slay their savage masters, too," and the look she gave Tumithak, as she finished speaking, caused Nikadur to smile discreetly and to turn away and busy himself with studying the various possessions of the shelks.

#### CHAPTER IV

#### The White and Shining Rods

POR some time, Tumithak and Tholura sat conversing beneath the great tree, telling each other of the lives they had lived in the corridors. Tumithak was filled with wonder at the idea of finding this girl whose mind was such a strange parallel to his own and he plied her with dozens of questions concerning her past. And of course, she questioned him, too, and Tumithak recounted the great adventure which had first brought him to the Surface from his home corridors, so far below, and you may be sure the story lost nothing in the telling.

Nikadur, meanwhile, had made several discoveries that interested him greatly. The weapon which cast the ray of heat still lay where it had fallen, and now the line of burnt and blackened earth which streaked from the nozzle had begun to glow redly with the intensity of the heat. And some distance away dense smoke arose, where the green vegetation smoldered and burned. Nikadur approached the shelk-weapon diffidently, wondering how it could be possible for such a cool thing as the hose appeared to be to give out such intense heat. But this was a puzzle far beyond his intellect and so, placing it in his mind simply as a shelk wonder, not to be understood by men, he turned his attention to the long narrow car.

The machine was about twenty feet long, low and

stream-lined and made of some strange yellow metal. It still stood balanced on its two wheels, and as Nikadur drew near to it he could hear from within it a subdued, throbbing hum. He inspected the controls, but was unable to comprehend them and so he turned to the rear of the car where lay the box of white and shining rods. He stooped over them, half-expecting them to be white-hot, but feeling no glow of heat from them, he finally picked up enough courage to take one of them in his hand and found out to his surprise that it was quite cool.

Nikadur examined it curiously. About four feet long it was, and a little over half an inch in diameter, and as he swung it about his head, Nikadur was struck with a brilliant idea. These rods of metal would make excellent ax handles. He thought of how proud he would be to possess such a beautiful weapon. And then, at the thought of the word weapon, his eyes instantly returned to the box and hose lying to the right of him. There, indeed, he thought, would be a real weapon, if a way could only be found to control the heat or to turn it off and on as the shelks apparently could. For the first time it dawned on Nikadur that this weapon in the hands of a man might be as dangerous to a shelk as it had hitherto been to humans. It was an epochmaking thought, and Nikadur must be given full credit for it. He turned to where Tumithak and the girl sat, still talking, and called to the Loorian chief,

"What shall we do with the shelk weapon, Tumithak?" he asked. "Think you there is some way to stop this terrific blast of heat as the shelks do? Perhaps we might find a way to control it and to keep the weapon for our own."

Tumithak was about to answer when Tholura gave a vexed little laugh and started for the weapon.

"How silly of me," she exclaimed, "I should have noticed it before." And picking up the long nozzle, she snapped back a small lever—and the weapon was harmless! The Loorians gasped.

"You know how to operate such a weapon?" cried Tumithak. "Where did you learn? What else do you know of the ways of the shelks?"

The girl smiled. "I know little of the ways of the shelks," she answered. "But of the ways of our ancient ancestors, I think I know far more than you. What you have been telling me of Loor and of your corridors shows that you have little or no knowledge of the wisdom of the ancient ones. There, at least, the Tains excel. For many hundreds of years, they have kept the traditions of the great wisdom of our wise ancestors, and in our museums, which are also our worshipping places, we have many tools and machines that were once used by those wise ancestors, and they are always kept in perfect repair by the priests. But alas; the fuel, the power that makes them operate, is unobtainable, and so the Tains are no better off than the most ignorant of those blind savages of which you have been telling me. Yet if the day should come when we again learn the secret of that lost power-" Tholura paused, her eyes shining. "There is something to

which you might well devote your life, O Shelkslayer!" she cried. "Could we but find the secret of that lost power, we might face the shelks on equal terms. And then—"

"And then," cried Tumithak, catching her enthusiasm and grasping the shelk weapon from her, "a raid on that stinking shelk-hole of Shawm! Fire-hoses blasting down tower after tower! Foul Mog and savage shelk alike fleeing in screaming terror to the woods!"

#### A Sudden Alarm from the Distance

HE was not finished with his fantastic dreaming, yet he stopped suddenly as a sound came to him distantly from the woods in the direction of Shawm. Nikadur heard it too, and laid a warning hand upon his arm. The three were instantly silent, straining every ear, listening. Unmistakably, from afar came the faint clattering of an approaching band of shelks, and quite clearly it was no small party. From the heights of their dreams, Tumithak and Tholura crashed to the depths of reality. Their human natures betrayed them and instinctively they turned to flee in the direction opposite to that from which came the sound of the voices. Strangely enough, it was Nikadur who caused them to hesitate. He had not yet brought to Tumithak's attention the white and shining rods that he had discovered, and a certain tenacity of purpose, that was characteristic of him, made him determined to take some of them with him as he fled. So he seized Tumithak by the arm and restrained his flight.

"Are you going to leave without taking the shelks' heads, Tumithak?" he asked. "And wouldn't these rods make excellent ax handles? Let us at least take a few of these rods with us. back to our pit."

Tumithak paused at once, rather ashamed of his sudden panic. He picked up two of the shelk heads and fastened them to his belt, while Nikadur picked up the other. Then he approached the car and for the first time, took a good look at it and at its contents. He was struck at once, as Nikadur had been, with the beauty as well as the utility of the shining rods of metal. So each of the Loorians took up about a dozen of the rods, and then Tholura, with a practical eye to the future, carried the remaining rods some distance away from the path and buried them in a pile of leaves Then the three fled, leaving the path and running in a direction pointed out by Tholura.

"This way lies the pit of the Tains," explained the girl. "You could not now return to your own corridors without passing around the party of shelles which we hear approaching, and that would be a heedless and unnecessary danger. And perhaps, in their own pit you can, by example, instill some courage into those crawen cowards, the Tains."

#### Tumithak's Caution in the Face of Danger

T UMITHAK was anxious to return to his own pit, but in spite of all his brave and boastful talk, he still retained enough instinctive caution to wish to avoid contact with a large group of shelks. He was no

superman, he well knew, and just at present it seemed the better part of valor to seek safety some place below the ground where conditions would be more familiar to him than they were in this amazing Surface world. His companions back in the pit of Loor could probably take care of themselves for another day or two, without his help, in fact, it was most probable that they had already given him up for dead and returned to their own cities. So it was that Tumithak decided to turn and direct his footsteps toward the pit of the Tains.

For a while, the three ran swiftly through the trees while the sound of the shelks' voices came to them ever more distantly. At last they could be heard no longer and the adventurers slowed down their pace to a hurried walk. The Loorians took time now to make a pack of the shining rods and to fasten them on their backs so that their hands might be free. Tumithak also fastened the shelk's fire-hose to his back, and then they continued their journey in high spirits, for well they knew that in this day they had already accomplished more than any other man had accomplished in a dozen preceding centuries.

#### The Afternoon Rest-The Alarm Is Over

B Y mid-afternoon, they had covered quite a distance and the party of shelks was almost forgotten. Tumithak amused himself by familiarizing himself with the operation of the fire-hose, and many a sapling and small bush burst into flame as he directed the heatray upon it. Presently the forest thinned and was replaced by a park like expanse, thinly wooded, through which they were able to make much better time. At last the trees disappeared entirely and they came to a broad shallow valley of meadow land, and here, by the side of a great glacial boulder nearly eight feet high, the three sat down to rest and to eat from Tumithak's diminishing supply of food-cubes. They munched their food in silence for awhile and then Tholura spoke softly: "Much may be accomplished with the shelk weapon we have, Tumithak. I think we had better consult about it with Zar-Emo, the leader of the priests of the Tains. He is very wise in the wisdom of the ancients, and he can advise us how we may best use the power that has fallen into our hands. We should go to him at once when we reach the pit that is my home."

Tumithak agreed and again they fell into silence. They were tired from their long walk, the warm afternoon sun fell on their faces, and in the fresh spring
air, there was a drowsiness that seemed to soak into
them and permeate their very souls. Their heads
drooped and Tholura, who had slept very little if any,
the night before, had even fallen into a little nap when
suddenly Tumithak sat up, every sense alert, his finger
to his lips to caution Nikadur to silence. Ummistakably,
from the other side of the boulder had come a familiar
scratching sound! Some creature had moved, on the
other side of the rock; was it shelk, man or some lesser
animal?

Silently, the two Loorians stood there, immovable, until the sound was repeated. Evidently the creature or creatures had just arrived and had no knowledge of the party on the other side of the rock, for they were making no effort to avoid producing a noise. Tumithak unloosed the shelk weapon which he had on his back, took the nozzle in his hand and tiptoed to the side of the rock. Reaching the edge of it, he cautiously lowered his head and slowly, slowly peered around the corner. o There was a sizzling spit, Tumithak jerked his head violently, and the grass a few feet beyond him burst into flames. Tumithak clapped his hand to his head, where a great singed spot of hair bore witness to the narrowness of his escape. Before he could speak or so much as warn the others, a shelk leaped into view, a fire-hose in its claws and a look of savage fury in its cold eyes!

#### A Shelk Attacks Tumithak

N OW there is no doubt at all that if such a meeting as this one had occurred a dozen or so years later, when Tumithak as Lord of Kaymak had made his name a name of wonder and hate throughout shelkdom, there would have been better chance for the Loorian chief. But at this early day, the shelks were still the lords of all the earth and the idea of a man being on equal terms with a shelk was unthinkable. Therefore, the shelk, seeing Tumithak dodge behind the stone, thought of nothing but the sport of killing a man, and so immediately gave chase. It exhibited no caution in pursuing him, it probably felt that at most he could only be armed with a sword or perhaps a bow and arrows, and so it leaped around the edge of the rock-swinging its heat-ray, it leaped-straight in front of the fire-hose that Tumithak held in his hand. The Loorian snapped the lever, there was a hissing crackle of sound, a clattering cry, and the shelk was no more, another enemy of man had gone to join its fathers in that legendary land upon the mother planet.

Tumithak's mind was calm, yet it was functioning rapidly. Almost immediately, he decided that his best course was to pursue the advantage he had gained, and suiting the action to the thought, he again started around the rock, his weapon, this time, playing before him. He rounded the edge of the huge stone, half expecting to see the entire party that they had heard earlier in the day, but instead, the sight that met his eyes caused him to smile broadly and to mentally give himself several pats on the back. There were no more shelks, but about a hundred yards away, two Mogs were fleeing rapidly, dodging from tree to tree; while on the ground lay two strange cocoon-like bundles, quite evidently abandoned by the hunting men when they had seen the death of their master.

#### Tumithak Frees the Captured Datto and Thopf

T UMITHAK turned and motioned his two companions to follow him and then, seeing that the two fleeing Mogs had already fled beyond the range of the fire-hose, he ignored them and approached the

#### TUMITHAK IN SHAWM

strange bundles. He eyed them carefully, their size and peculiar shape making him decidedly suspicious of what their contents might be. Halfway toward them, he stopped fearfully—he had caught a glimpse of a human face on the far side of one of them—he was right, there were men in these bundles! And then almost immediately, his half-uttered cry of alarm turned to one of surprise and delight and rushing to the bundles, he began to hack at their binding threads and cords like a madman.

Nikadur and Tholura, timidly following Tumithak round the boulder, heard his cry and started back, then, realizing that it was not a cry of fear they heard, lastened to see what had caused their leader such surprise. They had hardly come within sight when Tumithak called: "Nikadur! Come and help me!" and Nikadur, drawing his sword, rushed forward just as Tumithak cut the last of the binding cords from the body of —Datto. the Yakran!

For a dozen seconds, Nikadur's mind was a hodgepodge of jumbled thought. Tumithak had found the Yakrans! How did they come to be here? Were they alive or dead? Why had the shelks brought them here? He was recalled from his amazement by the voice of Tumithak: "Unbind Thopf, Nikadur! They are weak from the tight bindings of the cords. They will be all right in a few minutes."

Nikadur hastened to obey and shortly the Yakrans were freed of their bonds and Tholura was pouring water down their throats, while Tumithak and Nikadur rubbed their limbs to restore the circulation. It was a long while before the Yakrans showed any signs of interest in their surroundings, indeed they seemed to be in a semi-conscious daze, but at last Thopf, sitting up and beginning to rub his own arms, said in a comically solemn tone:

"There are those in Loor and Yakra, Tumithak, who hold that you are a superman. Never before today have I thought as they do, but how else your presence here, with shek heads at your belt and shelk weapons in your hands, can be explained, I do not know. Tell me quickly how you came here, ere I suspect you of being a god!"

## Tumithak Tells His Story to His Rescued

TUMTHAK laughed. There was nothing more pleasing to that strange vanity of his than such a speech as this, but he had no intention of adding to his prowess by making himself into a mystery. So he answered at once, giving the Yakrans a fairly detailed account of his adventures and introducing Tholura as he did so. Datto and Thopf were amazed at the idea of another pit, this being one idea that had never entered their heads before. To them, the world had been the pits of Loor and Yakra, which, so legend said, opened to the Surface, and the Surface, to their minds, was merely a larger and roomier pit with more conveniences and luxuries. But when they heard of the pit of fte Tains, they agreed at once that the best

thing for all concerned would be a visit to that pit and an attempt to form an alliance with its people. The Loorians and Tholura were anxious to start, but the Yakaras were so stift and soor from the hours that they had spent wrapped with the binding cords, that they implored the others to give them a few minutes at least to rest and restore their strength.

So it was agreed to wait awhile and as they rested. Turnithak suggested that the Yakrans tell how they had come to be in this place, for of course the Loorians were as amazed at the Yakran's presence here as the latter had been at theirs.

#### The Two Yakrans Tell Their Story

D ATTO, who seemed to be feeling a little better than Thopf, acted as spokesman. "When I severed the rope that you were swinging on, Tumithak, I had no chance to see whether I had saved your life or only brought you to a more merciful death, for the shelks were swarming over me, and though I fought with all my strength, it was sheer numbers that overcame me. They were not able to use their weapons among the ropes and cables where we clung, and to that I attribute the fact that they did not kill me at once.

"But when they had brought me to the ground, they had apparently thought the matter over and decided that they would not kill me until they had given their chief a chance to see me. I was amazed and overjoyed to see Thopf alive and but little hurt, standing before me, when I reached the ground, held hand and foot by four Mogs. I was at once put in the care of four more Mogs, and, at a command from the shelks, we all left the tower and proceeded to the center of the city.

"You may be sure I looked about for signs of you as soon as we reached the outer air, but there was nothing at first to tell what had become of you. One of the Mogs, however, was evidently aware of your escape for he showed me a large party of shelks, armed and rushing away from the scene of our battle, and he pointed out the direction in which they were going.

"They pursue your friends, Wild Man,' he said, with a sneer, 'Your friends will soon rejoin you. Half of Shawm is pursuing them, even now! I didn't answer him, Tumithak, for I thought in my heart that he was right, that it was only a matter of time until you, too, would be with me.

"And so, after a while, we came to a tower that was taller than the rest and made of a different metal. We were brought inside and sat down on the ground, and presently a shelk dropped from the ropes above, a shelk who wore upon his head a crown such as you wear, Tumithak, and from that I knew him to be the leader of this city of shelks. The group of shelks who had captured me spoke to him and for a while they talked back and forth in their vile shelk speech, and I knew nothing of what they said. Then the chief shelk spoke to Tlot the Mog, whom we had fought with.

"'Tlot,' he said, 'I am told that one of these wild men, who is now being hunted in the woods, wore a crown

such as mine. Is that the truth?' The Mog cringingly admitted that it was.

"'Is it also true that it wore clothes such as the Esthetts wear?' The Mog nodded another affirmative, and the anger of the chief shelk was terrible to see. He turned to Thopf and me.

#### The Death of the Governor-Inferior of Shawm

" "THREE years ago,' he said, in his clucking voice, 1 'The Governor-Inferior of the town of Shawm was slain at the entrance to a man-pit and his head cut off and carried away. Certain superstitious shelks claimed that it was done by a wild man from the depths of the pit, but they were laughed into silence. No man, we felt, had ever been born with the courage to do that. It seems now that they were right and we were wrong. Whence came you, wild men? Tell us the way to your pit, that we may wipe out the menace that confronts us.'

"I was about to answer him, Tumithak, for I was trembling with fear and terribly afraid that I would die, but suddenly it seemed that a courage was born of my very desperation. I must die anyhow, I thought, should I die giving my enemies aid in slaughtering my relatives and my friends? I answered the shelk and I must have surprised him mightily with my answer, for I surprised even myself.

"'Foul spider,' I said, 'Too long have my people quailed and fled before you! If I choose not to answer your question, how can you force an answer? Go and ask of your Esthetts whence came the doom that has befallen them! Perhaps they will satisfy your curi-

Tumithak burst into laughter as did Nikadur, and Tholura looked as if she could not believe her ears. "You told him that?" chuckled Tumithak, as his

laughter died. "What did he then, Datto?"

#### The Anger of the Shelk at Datto's Rejoinder

H IS anger, if possible, grew even greater. He clacked out an order, and several shelks left the room, hastening, I doubt not, to see what had happened to the Esthetts. Then he gave another order, but with this order several of the other shelks seemed to disagree. For some time they talked, and one of the foul Mogs, to frighten me I suppose, explained that the chief shelk, whom he called Hakh-Klotta, desired to slav me at once, while the others believed that we should both be sent to a place called Kaymak, the great town of this part of the Surface, for here there were shelks that could force us to divulge all that we knew, even though we would rather die than tell. And at last these shelks prevailed over old Hakh-Klotta and we were taken from the great tower and thrown into another, with a shelk and a dozen Mogs to watch over

"We stayed there for many hours, and the dark time came again, and while the shelk slept, the Mogs took turns at watching over us. When again the light came, Thopf and I were led out and brought before the great

tower again. We waited awhile and then there appeared a great wonder-a hugh machine that flew in the air like a bat, Tumithak! It came over the shelk towers and settled down on the ground near us and then the door opened and we were hurried toward it. Shelks emerged from it and dragged us in, and then, to our horror, the machine again rose into the air and flew away with us!

#### The Flying Machine Brought Down by the Captured Datto

"WE had not flown very far when Thopf noticed a wonderful thing. One of the shelks sat in the front of the little cabin in which we were and he looked constantly out of a window in the front. In his claws he held the end of a little stick, the other end of which disappeared in the top of a box set by the window. When he moved this stick to the right or left, the flying machine turned as he moved it. And when he pushed the stick down, the machine went down also! Thopf called my attention to this fact and a desperate plan came to me. Without even acquainting Thopf with the details of my plan, I gave a sudden lunge that tore me from the grasp of the Mogs that held me and threw myself upon the shelk that held the stick.

"As he fell with me on top of him I seized the stick and pushed it downward as far as it would go. The shelks screeched with fear and all leaped upon me, I rose to my feet, hurling them right and left and then there was a crash and I knew no more.... When I recovered my senses, I was tied up as you saw me and the Mogs were carrying Thopf and me through the forest. Then you came, and the rest you know."

"The flying machine was wrecked so that it was useless," spoke up Thopf, who apparently had seen more of the crash than Datto had. "Two Mogs were killed and three shelks, leaving only one shelk and the two Mogs that escaped from you. The remaining shelk must have decided to return to Shawm and await the coming of another flying machine, for he gave orders to the Mogs to carry us back to the city. They tied us up thoroughly, to make certain that we could do no more harm and then the shelk gave orders to them to begin the march. We had marched about four hours, I think, when, tired and worn out from carrying such heavy loads, the Mogs insisted that they take a rest beside this huge rock, where you found us."

"Did you learn much of the customs of the shelks?" asked Tumithak. "How they operate their strange machines, or what other weapons they have? How they live, or what they eat? More and more I feel that the greatest handicap that men have is the lack of knowledge of our enemies."

#### Datto's Story About the Shelks

ATTO hesitated, "I learned little enough about them, O Lord of Loor," he answered. "But one thing I noticed that may help us in the future. Do you remember how silent and deserted the town seemed to us when we first saw it? And how with the coming of the light, the town at once awoke? Well, when the light of the Surface again sank below the floor, and darkness came, a silence again came over the city. For a while, Thopf and I were at a loss to understand what had brought that silence, and then at last we understood. These dark periods, Tumithak, are used by the shelks as sleeping times, and all the shelks in the town go to sleep until the light returns, save only a few who remain wake as guards. If ever the time comes when we return to our own pit, and can attack the shelks, we must be sure to attack them during the time of darkness."

"A discovery that may prove of value, too," said Tumithak, and was about to make some further remark when Tholura interrupted him.

"These discussions, Tumithak," she said, "Could they not be continued later? The light sinks toward the Floor, and we are still some distance from the pit of the Tains. Let us be going."

Tumithak saw the wisdom of her suggestion and in a few moments the party was moving off across the broad plain that led to the foot-hills in the distance. Nikadur had armed himself with the fire-hose of the slain shelk, and had given his bow to Thopf, who was no mean archer, while Datto had taken up a short sword which had been dropped by one of the Mogs in his hasty departure.

#### On the Way to the Pit of the Tains— An Interruption by the Shelks

THEY traveled for several hours and were, according to Tholura, within a very short distance of the pit's opening when Thopf gave a cry of fear.

"Look behind, Tumithak!" he cried. "We are pursued!"

Sure enough, in the distance behind them was a large band of shelks, a band that was rapidly drawing closer. The pit-men were amazed at the speed with which the beasts approached. They did not run, but came on in great springly leaps that carried them over the ground at a terrific speed. There was little doubt that it was the same party that they had heard earlier in the day, probably turned from their original journey by the Mogs who had escaped during the fight at the rock. There was no doubt that the shelks were pursuing them. Tumithak uttered an exclamation of vexation and despair and half turned to face them, but Tholura dragged him on.

"Quickly!" she cried. "We are almost to the entrance to the pit. We can make it, and once in the pit, perhaps we can elude them in its maze of corridors."

So they turned and fled into the low foot-bills, and for half an hour they ran wildly behind the girl in blue. But ever, as they glanced behind them, they saw the shelk party drawing nearer. At last, when it became evident to Tumithak that they must either turn and face the shelks or die fleeing, the girl suddenly stopped.

"Quick! Behind this stone!" she exclaimed, and looking where she pointed, Tumithak saw a narrow cleft

between two rocks, "Inside," she panted, "Perhaps we can yet elude them."

But Tuniithak knew that any attempt to escape facing the shelks was now hopeless. The spidery creatures were not a hundred yards away, and already, as the party leaped into the pit, he saw the fire-hose in the claws of the foremost shelk point in his direction. He raised his own hose, sent a blast of heat toward the shelks and then sped into the cave-like pit-mouth himself.

#### The Party Ordered to Divide at the Tains' Pit

"Datto, Thopf and you must take Tholura on, to her people. Nikadur, you and I are armed with shelk weapons; we must stay here and attempt to drive off this party of shelks. If we all fed now they would follow us to the town and wipe out the whole city of the Tains. Come, Nikadur," and Tumithak stepped back toward the entrance.

For a moment, the others hesitated. Then Nikadur stepped to his chief's left, his fire hose ready in his hand. And to Tumithak's surprise, Tholura took her place at his other side.

"I cannot leave you, Tumithak," she said, "Not while you prepare to die for me and my people."

Tumithak gave a gesture of impatience. "I am not so foolish as to die for a city of people of whom I know nothing, Tholura. This will not be as hard as you think. I am well protected, here in the entrance, and am armed as well as they; while they are in the open and are ignorant of the fact that I possess and can operate one of their fire-hoses. See, I will soon wipe them out."

He raised his fire-hose as he spoke, and sent a blast out of the pit mouth. A clattering screech of surprise broke from the shelks without, and Tholura, glancing over his shoulder, saw them suddenly break for shelter. Three of them already lay upon the ground, one quite dead, the others hopelessly burned, Tumithak laughed, and again his fire-hose spat its invisible ray toward them. A fourth shelk dropped, and then he darted back, and the wall at one side of the cave glowed for a second and hot splinters of rock flew off and scattered about them. When they ventured to look out again, the shelks had managed to conceal themselves behind rocks and trees, and the battle settled down into a game of waiting. Presently Nikadur uttered a soft pleased ejaculation and raised his hose. One of the huge trees began to splutter, close to the ground, where his heat-ray touched it, and then, with a clacking cry of anguish, a shelk sped from the shelter which the heat had made untenable and fled for a nearby rock. Halfway there, Nikadur's ray met him, and he fell, an unrecognizable cinder.

#### The Loorians' Laughter as They Fight the Shelks

THE Loorians laughed again. So successful had the day's fighting been that they were beginning to underestimate the shelks, beginning to believe that these

enemies were not as dangerous as they seemed. But now something was to happen that was to revive their respect for the shelks, to make them realize that after all they knew little of the uses of the shelk weapons, and that it would be many a day before they could really meet the savage beasts on even terms.

The first knowledge they had of anything strange happening was when Tholura pointed to the roof of the cave. It was glowing, a dull red, where the firehose of some invisible shelk was playing on it. There was little danger to them, Tumithak thought, for it was several feet above their heads, but nevertheless the shelk persisted in his burning of the roof. And then—Tholura screamed, and seizing Tumithak by the shoulder draged him backward into the cave.

"Back, Loorians, quickly," she shouted to the others, and it was only the old instinctive timidity in them that enabled them to rush back quickly enough. With a crash and a roar that almost deafened them in the closely confined corridor, the entire entrance collapsed and fell inward. Had they been but a second later, they must have all been crushed beneath the rock as it came tumbling down.

#### CHAPTER V

#### The Wisdom of Zar-Emo

THE narrowness of their escape temporarily shook the entire party. Thopf and Nikadur both had several small cuts where flying bits of rock had struck them, and for a little while, Tumithak was frankly dazed. Presently Tholura gave a trembling little lauph.

"We still live, Loorians," she said. "Truly, I am beginning to believe, Tumithak, that you really do bear a charmed life. The shelks evidently meant to crush us beneath the rock of the entrance, but they have defeated their own ends. We are not only alive and almost unhurt, but we have escaped from them, at least for the present."

The men made no reply to this. They did not share the relief of Tholura, for they realized that even if they were cut off from the shelks, they were also effectively cut off from their return home; marooned in a corridor whose occupants might even yet prove to be inimical. Presently, Tholura turned and began the descent of the corridor. The others followed in silence, still shaken from their recent adventure, but presently they began to observe the corridors that they were passing through. Such a maze of blind alleys and false apartments, Tumithak had never seen, and his head was soon spinning with the attempt to remember the way that he had come. They had walked for but little more than an hour when they began to notice signs of occupancy of the apartments. Tumithak was amazed. He had heard, first from the conversation of the Mogs in the tower, and later from Tholura herself, that the pit of the Tains was very shallow; but that people would be living only an hour's walk or so from the Surface seemed foolhardy in the extreme. No wonder the shelks preferred to hunt in the pit of the Tains. Compared with a hunt in this pit, a raid on Yakra would take on the appearance of an extended expedition.

#### In the Pit of the Tains-The Great City

H OWEVER, Tumithak was to learn that the Tains had some small protection at least, in this labyrinthine maze of corridors. Tholura led them for at least two more miles through a series of pits and corridors that left them hopelessly puzzled. At last she paused as they reached the bottom of a ladder that led into a long, broad corridor.

"Here begins the city of the Tains, Tumithak," she said. "I think I had better go on ahead to tell of your coming. You wait here until—" She broke off with a gasp as a figure suddenly burst from a near-by apartment and hurled itself upon Tumithak. It was a boy, a youngster of perhaps sixteen, armed only with a short sword, but so fierce was his attack that for a moment Tumithak was hard to put to defend himself.

"Flee, Tholura," cried the lad, his sword sweeping and darting through the air with amazing skill, "flee while I can hold them from you!" And then to the Loorians: "Foul Mogs! You shall never touch my sister while I live! Defend yourselves before I slay you!"

Datto was about to smite the boy with his sword, his only thought to protect Tumithak; but Tholura stopped him with her next words.

"Stop, Luramo," she cried. "Stop, I say! These are friends!" And then to Tumithak: "Oh, don't hurt him! He is my brother!"

Tumithak and Datto dropped their swords, and after a moment, the boy followed their example, a sheepish half-smile coming to his lips.

"This is my brother Luramo," announced Tholura, placing her arm about the youth's shoulder. "He is the youngest of my brothers, but I think he is also the bravest."

Luramo grinned happily.

"You bring strange friends, Tholura," he exclaimed, "These are not Tains, nor are they Mogs, I see now. Tell me, who are they?"

"Greater than Tains or Mogs are the ones that are here," answered Tholura. "This is Tumithak, Slayer of Shelks, and his companions, who have also slain shelks! I was out upon the Surface, Luramo, and there I was beset by three Mogs and three shelks! And while I fought with the Mogs Thumithak, with but one of his friends to help him, slew all six of them and saved me! Behold the evidence of his greatness!" and she turned Tumithak around that Luramo might see the shelk's head that hung from his belt.

Luramo stared in awe. For fully a minute he stared, and his thoughts can better be imagined than written. Then slowly he held his sword out to Tumithak in the age-old symbol of allegiance. Tumithak smiled a little and touching the sword lightly accepted the boy's fealty. Though he thought little of that act at the time in after years he was to value that allegiance over almost any other's, and Luramo became one of Tumithak's brayest warriors.

#### The Allegiance of the Boy, Lurano

AND now Tholura was looking at Luramo anxiously.

"What was it, brother," she asked, suddenly,

"that brought you here to the edge of the city? Is all
well with them at home?"

"Well enough, I suppose," answered Luramo, scornfully. "Father still cowers in his apartment and bemoans the fact that his two daughters have died at the hands of the Mogs, for of course he thinks you dead, too. And Luragar and Bathlura try to comfort him, and swear that you will be avenged if the Mogs ever come to the city again. But they make no attempt to follow you, though they know that when you left the pit you went to almost certain death.

"I spent many hours trying to stir them up to go in search of you, Tholura; but they found one excuse after another to remain at home, and so at last I decided to find you myself. You see," he made his confession somewhat shamefacedly "I didn't dream that you would actually go all the way to the Surface. I thought you might wander here in the corridors and that here I would find you. I—I think I would have been afraid to renture on the Surface by myself."

Tumithak suddenly laughed and gripped the lad's hand in his.

"Luramo" he said, in a delighted tone, "surely I have found two after my own heart, in you and your wonderful sister. Do not be ashamed of what you have not done. I doubt if there is another man, in all the city of the Tains, who would be bold enough to do as much as you have."

Luramo smiled a trifle proudly, and as Tholura turned to resume the interrupted journey, he sheathed his sword and fell in behind Tumithak, taking his place with the Yakrans and Nikadur. After a while, Tholura called to him and said: "It would be well, Luramo, if yow were to hurry ahead of us, to inform the people that we are coming. If you do not, some one else may make the same mistake you did and trouble may ensue."

So Luramo ran ahead, and in a few minutes disappeared from sight around a bend in the passage. Some fifteen minutes elapsed, during which the party strolled slowly down the corridor, and then Luramo was seen approaching at the head of a great crowd of people. The crowd moved cautiously, half fearfully as was the custom with men, but one could see that they were very curious, and all excited at the new wonder of which Luramo had told them. In the midst of them, and old man strode, a man dressed in a tunic all of white, and whose long, thin beard reached almost to his waist.

"Zar-Emo," whispered Tholura pointing at him, "There is the priest of the Tains, the wisest of all the Tains in the wisdom of our wise ancestors."

#### The High-Priest, Zar-Emo

H E came, his right hand extended upward and outoutward, a sign of peace which Tumithak recognized and returned. The party of Tains halted a short distance away, and for a while the two groups stood, appraising one another. Then Tholura spoke.

"I have been to the Surface, Zar-Emo, and I return bringing guests. No doubt Luramo has already told you of how these men saved me, slaying shelk and Mog alike with their strange weapons. This one is Tumithak, their chief and the greatest shelk-slayer, behind him stands Nikadur, Datto and Thooft."

Zar-Emo acknowledged the introductions and then said: "Welcome to the city of the Tains, strange ones. It is many generations since one came here from without, other than foul Mogs and savage shelks. Yet we have had for long a prophecy that some day a hero would come from the Surface to teach us again the use of our ancestors' mighty weapons. Is it possible that you are he?"

Tumithak shook his head ruefully.

"No, Zar-Emo. I have heard of our wise ancestors' great wisdom, but I know far less of it than you do, if what Tholura tells me is true. Nevertheless, by a lucky chance, I have with me this shelk weapon. Perhaps from it you can learn something of the machines and weapons of old."

He unstrapped the fire-hose as he spoke and held it out to take it, when his eyes fell upon the white and shining rods that Tumithak still carried strapped to his back. As he looked at them, the priest's eyes grew large with wonder, and his hands, which had been extended for the fire-hose, dropped empty to his sides. He was silent with a sort of awe, and then at last he spoke.

#### The Story of the Rods Found in the Car

"THERE is something that you carry, O Shelkslayer, that is mightier and more potent than either the shelk's head or the fire-hose! Whence did you get those white and shining rods?"

Tumithak told him briefly of the battle that had resulted in Tholura's rescue, and of the finding of the rods in the car, after their victory. Zar-Emo nodded.

"I do not think I can be wrong," he said, a trifle dubiously, and then, taking the fire-hose from Tumithak's still extended hand, he turned the screw in the long nozzle, opened a cap at its end—and drew out from its interiors the half consumed end of one of the white rods!

"Behold the Power!" he cried, dramatically. "The fuel by which the shelks operate their machines! And you, O Tumithak, are truly the one spoken of in our prophecy, for you have brought the one thing needed to enable us to operate the many machines that we have in our museums!"

As he spoke, his many followers bowed their heads in worship and in awe, and Zar-Emo stood, waving the stub of the rod at Tumithak while he continued in almost a frenzy of fanaticism: "With these can the Tains power the fire-hoses which we keep in our museums! With these, we can power the strange machines that blast the corridors into the ground! We may make new corridors, far deeper than the ones we now live in, corridors so deep that the shelks and foul Mogs will never reach us! With these the Tains will know safety at last."

"With these," interrupted Tumithak, waving the priest to silence, "we will teach the savage shelks that man still knows his destiny! With these, we shall drive the shelks from their stinking towers at Shawm, and with these, at the last, we shall slay, to the last one, the beasts that have for so long attempted to rule the earth!"

Behind him, the boy Luramo gave a cheer. Datto slapped his chief resoundingly on the back, while Tholura nodded her head eagerly in approval. Zar-Emo and the other Tains looked as if they could scarcely believe their ears. Tumithak decided that now was a favorable time to convert them to his beliefs, and so he launched into a speech, much as he had done many times before in Loor and Yakra.

#### Tumithak's Speech

He told of his own life, and of his mission; he told of his first long journey through the corridors; and lastly he told of how he had slain his first shelk and of his subsequent elevation to the lordship of the lower corridors. Then he begged the Tains to look at him, to realize that he was but an ordinary man, and that what he had done, any man could do. And in the end, the result of his speech was just as it had always been. The Tains looked upon him as something more than human; from Zar-Emo down, they swore allegiance to him; but almost to a man, they refused to believe that it was possible for them to even attempt to fight against the shelks.

At last Tumithak turned to the old priest and asked that he be assigned an apartment.

"I shall probably be here for some time," he said.
"For the road to the Surface is blocked and I see no way to return to my own people until it is opened again.
And it will be many sleeps before that can be accom-

"Perhaps less than you think," answered the priest.
"I do not want to raise your hopes, but there may be a way to your corridors without returning to the Surface. I shall tell you more when I am sure of it," and turning, Zar-Emo led the way into the inhabited corri-

For a period equal to three days, Tumithak lived in the city and the Tains lavished upon him their hospitality. He was astounded at their food, for the Tains had preserved the method of making their synthetic foodcubes taste, and for the first time in his life, Tumithak found that eating could be a pleasure, rather than a mere dull duty. Indeed, not only he, but Datto, Nikadur and Thopf as well, were in danger of stuffing themselves into a state of indigestion.

#### Life Among the Tains

M OST of the time when not employed in eating or sleeping, Tumithak and his companions spent in the great temple or museum corridor, studying the wonderful machines that had been built by the ancestors of the Tains. The Tains had kept them in perfect condition, and they were all in perfect working order, even after so many hundred of years. Zar-Emo powered a firehose and a disintegrating machine, and showed the party how well they still worked. These two machines were of especial interest to Tumithak, for the one he knew how to operate and the other had been mentioned frequently in that famous book that he had found, so long ago, in the deserted corridor in Loor.

But these were not the only machines that the Tains had preserved, or that Zar-Emo knew the use or meaning of. The priest showed the strangers marvellous weapons that slew with shrill sounds; others that, so he said, turned the very air into a deadly poison that killed all who breathed it; and then, too, there were machines that helped man, among these being the machines that made the cool white lights that illuminated these corridors.

And all of these could now be used again, although sparingly, for even the rods that the Loorians had brought with them could not last forever. These rods were composed of a metal that had been activated by treatment which caused its atoms to break down at a terrific rate. And when it was exposed to a certain ray created in the machines its collapse into energy was greatly increased. But, although this method of securing energy allowed an enormous amount of fuel to be stored in a very small space, eventually even the white rods were burned up and gone.. So Tumithak decided that he must have a talk with Zar-Emo concerning the best use that the rods might be put to, in order that the greatest advantage might accrue. He suggested to the priest that he and his companions arm themselves with fire-hoses and attempt a return to their pit. Zar-Emo shook his head.

#### A Possible Alliance Suggested

"IT would be a great danger to attempt to fight your way back to the pit from which you came, Tumithak," he said gravely. I think I can help you in a way that will not only remove all the danger, but will bring your people and mine into an alliance that will be closer than you have dreamed.

Puzzled, Tumithak asked the Tain to explain himself, but Zar-Emo only shook his head.

"I am not at all sure that I can do what I hope to do," he explained, "and until I am, I prefer not to raise hopes that I may not be able to gratify."

But the next day, the old man called Tumithak and Nikadur to him and led them to a deserted corridor where a strange machine was set up. It was a machine far too complicated for Tumithak to understand. In appearance it was a metal box five feet high with a number of strange transparent tubes on the top of it, inside of which tubes there glowed strange lights. Out of the side of this metal box extended a long arm, at the end of which a great soft pad was fastened, apparently by suction, to the wall of the corridor. Zar-Emo pointed down the corridor, and there, approximately a hundred yards away, was another machine, identical in every respect to this one.

One of Zar-Emo's lesser priests was seated on a little stool that was fastened on the side of the metal box, and now, at a word from his master, reached up and placed on his head a strange piece of apparatus that entirely covered his ears. Then he turned a small knob on the box, and turning, called to the man that controlled the farther machine. The latter also placed the strange headgear on his head, and brought his own machine into play.

#### Trying a Sounding Machine in the Corridors

FOR several minutes, the two turned and twisted the little knobs and at each twist they listened intently, as though they could hear some distant sound that was inaudible to the others. Then the nearer of them turned to Zar-Emo.

"There is a different tune here, Zar-Emo," he said, "How are we to tell what it represents?"

The priest motioned him to get up from his seat, and then told Tumithak to take his place. Hesitatingly, the Loorian did as he was requested, and gingerly put the headpiece over his ears. As he did so a strange tone suddenly filled his ears, a continuous monotonous hum. Tumithak took the headpiece off and looked at the chief priest inquringly.

"The machine, Tumithak," explained Zar-Emo, seeing the puzzled look in Tumithak's eyes, "was used by our ancestors to detect underground veins of metal, or water or even underground caverns. It is based on the principle of the echo. One part of this arm which is fastened to the corridor wall sends out a sound into the rock, a sound of so high a pitch that human ears cannot detect it. This sound travels through the rock until it strikes some different substance and there a portion of it is reflected back to another part of the arm, a receiver which picks it up and so alters it that it can be heard in the earpieces fastened on Coritae's head.

"Now this sound is not like the sounds that we are used to thinking of. As I have said, it is far too shrill to be heard by human ears, and such sounds act quite differently from common sounds. In the first place, these sound waves can be sent in a beam, as light waves are; and in the second place, they are slightly altered by the density of the material that reflects them. Thus it is possible to tell in just what direction the refecting material is, and whether it is liquid, solid, or, say, a cavern or hole.

"Now it has been my thought, Tumithak, that if with this we could discover a long straight cavern running through the ground we could be fairly sure that it would be your home corridors and thus we would know in just what direction they lie. And by the help of another machine, some distance away, we could tell the exact distance of your corridors from here."

#### Locating the Loorian Corridors by Sound

T UMITHAK had listened in a daze. Vaguely he had understod some part of what the Tain had said, but this last was too much for him. It was necessary for Zar-Emo to explain to him the mystery of the two angles and an included side in great detail before he finally saw how it would be possible to measure the distance to his home from this far-off corridor. And when he did understand his wonder was increased.

"Truly, Zar-Emo," he cried, "the wonders of our ancestors were unending. But tell me, why have you gone to all this trouble to locate my home corridors?"

The Tain smiled proudly as he moved to take his place on the seat from which Tumithak, in his excitement, had moved.

"Have you forgotten the disintegrating machine?" he asked. "Tumithak, I intend to drive a new corridor from the pit of the Tains to the pit of the Loorians!"

The hours that followed were exciting ones. Time and again, the workers thought they had discovered the distant corridor, only to find on further examination, that their discovery was only some small cavern or underground stream. But at last they detected what, from its straightness and regularity, could be nothing other than a man-made corridor. Then Zar-Emo and his men began a series of tests and problems that ended, at last, with the verification of the exact distance and direction of Tumithat's home corridor.

The party returned to the inhabited portion of the pitch and jubilantly prepared for the work of the next day. The disintegrating machine was taken to the spot where the detectors had been and there set up, a queer, monstrous thing with a great trumpet-shaped ray projector in front, and with three seats on the back of it to accommodate the men that worked it. Zar-Emo left his men working over it and, taking Tumithak with him, returned to the city for supper.

"I feel that you should be one of the men to take the machine through the rock, Tunithak," he told the Loorian, as they finished the meal. "Not only because the honor surely belongs to you, but because it may be necessary to have someone to convince your friends that our mission is friendly. You will have little to do with the operation of the machine and that little will not be hard to learn."

So, after the time of sleep was over, the party assembled in the hall that contained the disintegrating ray machine. Nikadur and the Yakrans, who planned to follow Tumithak as quickly as possible, were each given one of the ancient fire-hoses, as was the boy Lurramo, who insisted that he be considered one of Tumithak's party. And to Tumithak's surprise, another insisted that she, too, be considered a warrior—none other than Tholura, who declared that she would not let her new friends go forth to any danger without also going along. So at last it was decided to let her go with them, and then Zar-Emo approached Tumithak, who already was at his seat on the machine, and proceeded to instruct him in his duties.

#### The Operation of the Machine

"SEE here, Loorian," explained the priest. "Behind you on this wall is a large white cross. Looking through this eyepiece in front of you, you will see another cross painted on this mirror in which you will also see a reflection of the first cross. As long as the reflected cross is superimposed on the other, your machine is going in the right direction. Should it vary by even so much as a hair's breadth, you must at once call it to the attention of these other men who work the machine. That is all that is necessary; my men will attend to all the rest. Your party will follow you as soon as the rock becomes cool enough to walk on. Good-bye, and let us hope that everything turns out as we have planned it."

He turned as he spoke and gave an order to the men seated with Tumithak. One of them turned a lever, there was a blinding flash of light, and as it dulled to a faint violet glow, Tumithak saw a great hole appear in the side of the wall toward which the trumpet-like projector pointed. The other man now pulled back on his lever, pushed a button of some kind, and the great machine moved slowly into the hole it had made. As it moved the hole grew deeper, and a hot gust of queer-smelling air swept out of it. Again the machine pushed into the hole, and again the further wall retreated. Tumithak and his friends were successfully engaged in an act that had not been performed by men for nearly two thousand years!

#### Boring the Tunnel

F OR hours thereafter, Tumithak kept his eyes fixed to the eye-pieces of the machine. It was tedious work, for it was not often that the machine varied from the straight path on which it had been set. Once in a while, it would strike some new vein of rock, and this might cause it to change its direction slightly, but then Tumithak would call this to the attention of the others and the fault would be at once corrected.

The huge white cross which Zar-Emo had painted on the back corridor wall grew smaller and smaller as the machine crept away from it, but when Tumithak could no longer see it clearly he focused the center of his own cross on the distant mouth of the new corridor and the machine continued on its way.

The heat was terific. Sweat was soon streaming down Tumithak's face and the faces of the two priests. At last after what seemed to be hours of continuous moving they unanimously agreed that they must call a temporary halt. The machine was stopped and all three lay back in their seats for a much-needed rest.

After about an hour they started the machine again. "We are probably more than half-way there," said one of the priests, "but this second half will seem much worse than the first. It is not so easy for the heat to secape now as it was when we were close to the city."

He was right. Never had Tumithak felt such heat before, and never had time dragged so. It seemed days, days of scorching merciless misery before one of the men announced that they were at last nearing their goal. Tumithak became eager now, and so, of course, the time began to pass more rapidly. And then, at last, a strange hollow roar began to sound from the rock in front of them, and in a moment, a small hole appeared that rapidly widened and as the priests hastened to shut off the power of the machine, Tumithak leaped from his seat and found himself in an old familar corridor.

#### A Corridor Familiar to Tumithak—A Letter from His Father Scratched on the Wall

HE stood in a section of that roughly unfinished corridor that lay between the Surface and the Halls of the Esthetts. Not far from here, he had once watched a group of shelks slav a group of Esthetts, and trembling with horror, had wondered why they did so. And not more than two miles down this corridor, if memory served him right, his band of warriors should be waiting. "Were they still there," he wondered," or had they given his party up for dead and returned to Loor and Yakra? Or had the shelks discovered them and slain them all?" Tumithak remembered with sudden misgivings the fact that Datto had told him of boasting to the shelk chief of having raided the Halls of the Esthetts. And the shelk chief had ordered an investigation! Unable to control his anxiety, thinking of a thousand and one things that might have happened, he beckoned to the two priests to follow him, and sped down the corridor.

As he neared the spot where his party should be, his amxiety increased, for a silence reigned that told him that the corridor was deserted. At last, he reached the place where his men should have been, to find that his fears were verified. But on one side of the wall a message had been scrawled, a message from his father:

"Tumithak," it read, "Our guards have reported the approach of a band of shelks. The savages of the dark corridors have offered to conceal us in the clefts and caverns of their home, and so we are leaving this place. If you ever return, seek for us in the dark corridors.

Tumlook."

Tumithak, at first, was for starting for the dark corridors at once, but on second thought he decided to wait until the coming of the party that would soon be arriving from the city of the Tains, for he knew that they would follow as closely as possible. So he and the two priests sat down and ate some of the food they had brought with them and then, entering a concealing apartment, they prepared to take a much-needed sleep.

#### The Meeting

HEY were awakened by sounds in the corridor without, and emerged to find Nikadur, Tholura and all the others who had arrived while they slept and had been much worried over their disappearance. Nikadur had discovered Tumlook's message, at last, and was about to make the attempt to lead the party down into the dark corridors when Tumithak and his companions were discovered. The party, reunited now, decided to begin at once the attempt to find Nennapuss and the other warriors, and so they began the descent; but they had not gone a mile when they came upon the entire party, warily returning to their former camping place. They had hidden in the dark corridors while the shelks held an investigation in the corridors above, and when they felt sure that the latter had again returned to the surface, they had boldly set out to return to the Halls of the Esthetts.

Nenapuss and Tumlook, who were leading them, were overjoyed to see their comrades safe again, and they eagerly plied them with questions. Tumithak related their story briefly and told of the wonderful machines that they had managed to procure. The enthusiasm of the Loorians and Yakrans knew no bounds; they even so far forgot themselves as to give a cheer that echoed again and again through the corridors. And then the leaders sat down and began to formulate a plan of attack upon the city of Shawm.

#### CHAPTER VI

#### The Whelming of Shawm

HE ensuing hundred hours were busy ones for the people of the pits. The six or seven miles of new corridor became a teeming thoroughfare, through which Tains, Loorians and Yakrans hurried busily back and forth, trading the captured beauties of the Esthetts for the wonderful food that was the secret of the Tains, and for the ancient weapons that were now so precious.

Tumithak returned to the city of the Tains and brought Zar-Emo through the new corridor to confer with his other chiefs on the possibility of attacking Shawn. For several days they plotted and planned, and at last a feasible method was devised. Nikadur, with Tumlook, Nennapuss and the Loorians and Nononese, would remain in the home corridor, while Tumithak, with Datto, Thopf and the Yakrans, was to go through the corridor and the pit of the Tains, and, returning over the Surface, was to attack the town from the other side.

The ones who remained in the pit were to wait for fifty hours, and then, in the third hour of the night following the expiration of the fifty hours, they were to attack. Thus if their plans went well the two attacks would be simultaneous unexpected and they hoped, overwhelming. The shelks would be caught between two frees and, so the pitmen hoped, wiped out to

the last one. The city of Shawm would be in the hands of men, together with all its wonderful engines and machines, and man would again have a place in the sun, on the Surface of the world.

It was a proud Tumithak that led his bravely singing Yakrans through the city of the Tains and up the labyrinthine corridors to the place where the entrance had been blasted shut by the shelks. They paused for a time, while a Tain with a small disintegrating machine opened the way for them again, and then they resumed their march, out over the Surface. And here Tumithak was halted by a party of Tains who had followed them up the corridor. There were about ten of them and leading them was the boy, Luramo.

"Wait, Tumithak," he called, "Here are a few more warriors to go with you. Not all the Tains are the cowards you seem to think them." He turned and beekoned the party to advance, and Tumithak perceived that the majority of them were mere boys, youths who had not yet completely developed the terrible fear that was so much more noticeable in the older folk. His eyes roved over the group and suddenly balted in surprise.

"You, Tholura?" he exclaimed in amazement. "You are going with these warriors? I fear this war party is no place for a woman, Tholura."

The girl answered him indignantly.

"I hope you spoke without thinking, Tumithak," she said, "Surely, if you but think, you will remember that of all the Tains, I was the first to dare look upon the Surface. Have you forgotten how you said that I was one after your own heart? And would such a one cower in the corridors while others went to fight the enemies of man?"

#### Tholura Is to Fight with the Warriors

TUMITHAK smiled. The girl had convicted him by his own words, and now that he stopped to think, he wondered why he had suggested that she remain behind. He only knew that he felt a sudden unexplainable feeling that it would be terrible to live in this world if Tholura were slain in the fight. He had sought to protect her in the easiest way—by ordering her back to the corridors.

But now he knew this was impossible, and so, with a shrug, he motioned her to take a place beside him, along with Datto and Thopf.

The party left the foothills and marched across the grassy plain without incident or adventure. Once in the forest, Tumithak felt safer, especially as night was approaching and he knew that, although this would make marching much slower, nevertheless, there would be practically no danger at all from the enemy. Dawn found them close to the spot where the other white and shining rods had been hidden, and soon after, to their great delight, they came upon them, still hidden in the leaves where Tholura had concealed them.

They realized that they could not be far from the city of Shawm now, and it was a cautious group of

warriors that moved slowly behind Tunnithak as he darted from tree to tree or crept along through the underbrush, whenever it was thick enough to conceal him. At last, they reached the summit of a rocky, sparsely wooded hill and looked down across the wood at its base to see the towers of Shawm in the distance.

The needle-like towers, with their connecting cables and gleaming metal sides presented a strange appearance to the pit-men, but the day had been so full of strange appearances that the only feeling they had was one of satisfaction that here was their goal. Tumithak continued to look out over the towers as if in search of something, and presently uttered a pleased cry.

#### The Entrance Opening to Loor

"L OOK there, Datto!" he cried. "See there, the opening to our pit?" and sure enough, beyond the group of towers could be faintly distinguished the shallow hole that held the opening to the wast corridors that led to Loor. Somewhere, not far below, Tumlook and Nennapuss waited with their army for the moment to arrive when they could sweep out and begin the conguest of Shawm.

Tunithak pointed out the pit-mouth to the others, Tholura and Luramo being especially interested in the location of the hole. While they were still looking at it, a cry arose from one of the Tains and turning, Tunithak saw him pointing up into the sky. The Loorian looked and gave a cry of fear, for sweeping down on them was one of the shelks' flying machines, a huge one, one that must have, concealed within it, at least a dozen shelks!

In a moment, the scene was one of indescribable confusion. Gone were the brave thoughts of conquest, the minds of the men were taken up only with the great hereditary fear that had for so many generations oppressed them. The Tains, and indeed most of the braver Yakrans, broke from the group and fled, vainly trying to hide themselves behind rocks, trees, bushes or whatever seemed to promise shelter. Ere two minutes had passed, the only ones who remained with Tumithak were Datto, Thopf, Tholura, the boy Luramo and three other Yakrans. These, all of whom were armed with fire-hoses, stood their ground and watched the oncoming flyer. Like a huge bird, its wings outspread, the machine hovered for a moment and then sank to the ground. A door in its side opened-and Tumithak sent a blast from his fire-hose into the opening! There was a clattering cry and the door closed again. Tumithak smiled grimly and motioned the rest of the party back. A large rock stood about twenty vards away. and to this he led them hurriedly, taking a position behind it and awaiting further movement from the shelks,

Now it was fortunate for Tumithak that this flyer was a freighter and as such was not equipped for fighting. Several of the shelks within it were armed, of course, but there were no guns mounted on the outside, nor was it possible to use a fire-hose from within, when the doors were closed. So the shelks could not attack the men from within, and, strange as it may seem, it never dawned on either Tumithak or his companions that the plane was absolutely at their mercy. From on many years had the weapons of man been directed only at their enemies, that the idea of destroying the shelks by burning down flyer and all never entered Tumithak's head. And so the battle seemed to have reached a deadlock.

## The Flying Machine Captures Tholura and Two Others

A ND then, suddenly, as though a decision had been reached within, the shelk flyer rose about fifty feet and swung above the rock that concealed the little party. It hung there for a moment, and then from beneath its hull, a huge claw-like hand of metal reached out, the car dropped with dizzying suddenness, and the claw closed over three of the party and swept them aloft! Tumithak gave a wild cry, as did the others, for one of the three who were seized was Thoulus!

The thoughts that swept over Tumithak as he watched the flyer swing aloft again were puzzling in the extreme. He saw, in his mind's eye, the battle in which he met Tholura; he remembered her bravery and her beauty; he thought of how dull and uninteresting his world would be if she were suddenly taken out of itand then, suddenly, he realized that he loved her. And she was being taken from him! Madly he cast about in his mind for some method whereby he might save her. Now the idea of blasting the flyer with his firehose came belatedly to him, but already it was so high that if he attempted this, Tholura was almost certain to be killed in the crash. While he sought some means of rescuing her, he saw the fiver sweep down over the forest and disappear among the towers of Shawm. Tholura, if not already dead, was a prisoner of the shelks!

For awhile, Tumithak gave way to grief. Little Luramo came up to him and took his hand, and Tumithak saw great tears in the lad's eyes, yet when the Loorian looked at him, the boy forced a smile and said bravely: "There is still work for us, Tumithak. Let us mount my sister after we have avenged her."

The brave words gave Tumithak a new grip on himself. Luramo, he knew, truly loved his sister, yet the lad remembered their mission was one that called for sacrifices even greater than this, if possible. It behooved Tumithak to remember it also,

#### Tumithak's Grief and His Recovery to Fight

SO, a few minutes later, Tumithak was his old self again; and calling back to him such of the Yakrans and Tains as could be found, he berated them roundly for their cowardice and urged them to redeem themselves as well as they might in the coming battle. Then he called to Luramo, and pointing to the distantly seen pit mouth of the Loorian pit, he asked: "Do you

think that you could find your way through the forest to the pit mouth, Luramo?" And when the lad answered in the affirmative, he went on: "You must go straightway and inform Nikadur that the attack must begin at once. The shelks in the flyer will surely warn Shawm of our presence, and so we can no longer delay the attack. Meanwhile, we who are here will attack at once. So hurry, Luramo!"

The little Tain sped off down the hill, and in a moment, disappeared into the wood at its base. Then Tumithak gave the command and the party moved to

the attack of Shawm.

Strange events had been happening in the shelk city of Shawm. It was not a large town, nor an old one, as towns go; it was little more than a recent settlement in this wild unsettled land, which had for many centuries been abandoned by the shelks. Yet in all the history of the town, nothing similar to these recent events had been heard of. From somewhere deep in the corridors, a race of men had made their appearance that were apparently wild and decidedly vicious. First had come the strange slaughter of a Mog with the accompanying pursuit and escape of the creatures that slew him; then close on the heels of that strange catastrophe had come the news that a party of shelks and Mogs had been slain by their own weapons in the woods beyond Shawm. The party that went to investigate had been wiped out almost to the last one, those who escaped returning to tell of men armed with fire-hoses, who had fled into the pit of the Tains. And this was most puzzling, for one of the wild men, who had been captured and supposedly sent to Kaymak, had intimated, while captured, that he had come from the pit that held the Halls of the Esthetts.

The shelks had at last begun to make preparations to invade both of the pits and make certain of their safety by completely wijning out all traces of men in them, when a flyer arrived in the city, telling of a large force of men armed with heat-rays, which were near the city, and bringing three armed specimens, in its

claw, for proof.

At once the wildest excitement prevailed. The shelks rushed hither and thither, arming themselves, taking posts in various portions of the city where a watch was maintained on that part of the wood from which the danger might be expected to appear, and getting ready all the strange weapons that the little town could boast. Hakh-Klotta, the Governor-Inferior. unable to believe that men could actually be intelligent enough to use heat-rays, called together a group of trained hunting men, and sent them off in the direction from which the flyer had come. He watched them from a tower as they crossed the cleared space between the towers and the trees, and smiled a savage smile as he noticed them near the trees in safety. Certainly, if there had been any wild men in the woods they would have burned down the Mogs before the latter reached the comparative protection of the trees, he thought. But hardly had these thoughts taken form in his mind before he saw a burst of smoke from the ground in front of the Mogs, and then another, and another; and before his very eyes, his Mogs fell to the ground, and slowly burned to cinders beneath the heat-rays directed on them from the forest.

#### A Real Danger Threatens the City

THIS convinced Hakh-Klotta that the danger was a very real one, and made him more cautious in his movements. He began to wonder if it would be possible to attack these strange men at all, seeing that they were hiding among the trees at a distance beyond the reach of the heat-rays. He knew that the pit-men dared not leave the shelter of the trees, but then, the shelks dared not leave the shelter of the towers. And so it began to seem as if the battle might take on the appearance of a siege.

But, meanwhile, the idea of a seige was very far from Tumithak's mind. He knew that he would be unable to approach Shawn from this point, for there was a broad open space of nearly four hundred yards between the forest and the towers; but the Loorian remembered that at the point where he had first escaped from Shawm, the trees had approached almost to the towers, and so, leaving a detachment of men under Datto and Thopf to besiege this portion of the town, Tumithak, with a dozen others, set off to attack the town on that side where the trees were closest to it.

#### The Attack

IT was fortunate for Tumithak that he formed the idea when he did, for the mind of old Hakh-Klotta was not slow and the thought of this danger came to him almost as soon as it came to Tumithak. As soon as he thought of it, he immediately dispatched a group of shelks to defend the spot, and so, as Tumithak and his warriors approached through the trees, they saw the shelks wending helir way through the towers.

Instantly, Tumithak called his men to attack, while at the same moment, several blasts of heat flashed at him from the party of shelks. He darted behind a tree, calling to his men to likewise conceal themselves, and then, turning on his fire-rose, he directed its beam at one of the towers beneath which the shelks were covering.

The shelks at once turned their rays upon the bases of the trees behind which the men were concealed, their idea obviously being to burn down each tree and then strike the man behind it. But Tumithak had been seized with a better idea, and so he called softly to his men to direct their fire at the towers to the right and left of the shelks, burning only those sides that were nearest the group. The others grasped his idea and at once began to carry it out. The trees were filled with the sap of early spring and so they heated slowly, but metal towers absorbed the heat rapidly and before the heat-rays could burn through the trees, Tumithak's object had been accomplished. Two of the towers, one to the right and one to the left of the shelks, suddenly collapsed, their foundations melting beneath them, and down they came with a crash, burying the entire group of shelks beneath them. Most of the shelks were killed outright, others were seriously injured, and the only one that was apparently unhurt, turned and sped like lightning farther into the city. The men looked on in amazement, unable to believe their eyes. Yet, incredible as the fact was, they were actually looking at a shelk, fleeing from a group of men. For a space, they stared in wonder and then it dawned on them that their brush with this party of shelks had been successful. The defenders were all dead or dying, and the way into Shawm was opened!

It was not the plan of Tumithak to dash recklessly into the city, however. He at once gave orders that began a steady, methodical burning of the towers in this portion of Shawm. One after another the towers crashed to the ground, their foundations blasted away by the terrific heat of the fire-hoses in the hands of the Yakrans.

#### The Towers Fallen, the City Exposed

AND as the towers fell, the pit-men moved forward into the ruins, and, concealing themselves, began the destruction of towers farther within the city. But they were not to continue their work of destruction for many minutes. Before a half dozen towers were destroyed, they found new parties of shelks opposing them, and in a moment of carelessness, two of the Yakrans were slain before they could properly conceal themselves.

Within the city, now, the men from the Pit were at an advantage. The shelks, however desperate, did their best to slay their enemies without destroying their homes, while the men had no such compunction, and would have gladly destroyed all Shawn to kill a single shelk. And so, in spite of a number of casualties, Tumithak and his men moved forward until he reached a spot where he could attack, from a little elevation, the party that was defending the town from Datto and his men.

Then the huge Yakran chief, his even huger nephew, and their savage warriors, dashed across the open space before the city and in a moment were in the town. With wild cries, they attacked the shelks, forgeful, now that they were at close grips with the creatures, of either fire-hose or disintegrating ray. And indeed, at such close quarters, the rays became double-edged weapons, liable to slay friend and foe alike, and even the shelks seemed to realize their danger and ceased to use them. Strange knife-like weapons appeared in their claws, sharp disks of steel mounted on sticks and rotating rapidly, like a child's pinwheel; dangerous weapons, indeed, for whenever they touched an arm or leg or head, it was sheered off instantly.

And so the battle raged in hand-to-hand conflict, like the battles of the ancient world, before the dawn of modern knowledge. For the first time in nearly two thousand years, Man was facing his enemies on equal ground, and a good showing he was making, too. The shelks already were yielding ground to the men, when a cry from beyond then told Tumithak tha Nikadur and the Loorians had emerged from the pit. He gave a triumphant answering cry and attacked the shelks with renewed vigor.

To tell all the details of the battle would require a story longer than all of this one. It had become a vast series of individual encounters, and in such a fight, heroes are made by the dozen. Thurranen of Nonone first distinguished himself in this fight, as did several others, who were afterward to become famous knights in Tumithak's kingdom; Luramo verified Tumithak's belief in him; while the others, Datto, Nikadur, Thopf, Nennapuss and Tumlook and their ilk showed added prowess by the fearful way in which they brought down shelk after shelk.

#### The Battle Reaching Its End

TWICE Tunithak faced old Hakh-Klotta himself twice lesser shelks bravely died to allow the old governor a chance to avoid the leader of the Pit-men. It was astounding to Tunithak to see how willing the shelks were to die defending this old ruler. It was his first contact with that strange social instinct that was afterwards to enable him to gain such great advantages over the shelks. He was in after years to learn that a battle with the shelks was somewhat like a game of chess—capture the king and you capture all.

But now the Loorian was ignorant of this fact and so when Hakh-Klotta avoided him he was content to attack some lesser shelk. And the battle continued, while shelk after shelk died in a manner that must have seemed strange beyond telling, to them. Imagine a aman dying in a battle with sheep and hogs, with sheep and hogs that used guns, knives and that united together to destroy a village! That is probably as close an analogy to this strange raid as we of today can conceive.

We must not suppose that the battle was entirely with the Pit-men. In places the shelks would be temporarily victorious and dozens of men would die under the whirling knives of the shelks. In places, too, men would be isolated from the main battle, and then a fire-hose, wielded by some shelk, would blast them to cinders before they could flee.

But for every man that died beneath the shelks' whirling knives, two shelks would perish beneath the swords or the arrows of the men; and for every group that died under the fire-hoses of the shelks, another perished beneath the fire-hoses of the men of the Pits.

#### Retreat to the Flying Machine

UNTL at last, as the sun sank low in the heavens, the last group of shelks gathered close to the huge flying machine that lay in the center of the village, and attempted to make a last stand. They had hoped, much earlier in the day, to enter the flyer and escape, ain order to bring help from the large city of Kaymak, some distance away; but Tumithak had forestalled them by ordering one of his men to play a fire-hose across the entrance from the protection of a near-by tower. And so they had been balked of their desire. They had made to they had been balked of their desire. They had made

their last stand here however hoping that some last minute accident would enable them to enter the flyer and escape.

It seemed that there would be little chance for them now. It would be but a moment until they were cut down. And then the Loorian, who had been guarding the entrance to the flyer, gave a cry and fell backward, his head burned to a cinder by the heat-ray of some concealed shelk sniper. Nikadur immediately directed his own fire-hose in the direction from which the ray had come, and had the satisfaction of seeing a burned shelk tumble screaming from the window of the tower, but the few seconds during which the door of the flyer was unguarded enabled fully half of the remaining shelks to enter the flyer and swing shut the door. Hakh-Klotta was the first to enter, needless to say, and then, as the door swung shut, the few remaining shelks died instantly under the rays of the Yakrans. Tumithak was just about to order the fire-hoses to blast the flyer to molten metal when a terrifying thought came to him. Tholura and the two captured Yakrans had not been seen in any part of Shawm during the fight. Was it possible that they were still in the flyer? If they were, to blast the flyer would mean their certain death. Tumithak turned sick at the thought of how close he had come to giving the order that would have slain them. He ordered his men back from the flyer and waited in anxiety to see if it would rise, bearing away with it the shelk chief and the one in all the world that Tumithak loved most. But as moment after moment passed, and the fiver did not move, he gained renewed hope. Perhaps the flyer was injured in some way, and could not rise.

#### Tholura Is Now a Slaver of Shelks

PERHAPS the shelks were so seriously wounded then, just as he was about to give an order to attack the mechine and try to get within it, the door of the fiyer flew open and a disheveled, white-faced figure stood in the doorway. It was Tholura; and on her head was a golden band such as the Governor-Inferior of Shawm had worn. And in her hand was a charred and dripping head—the head of Hakh-Klotta of Shawm!

"Tumithak!" she called weakly, and then, spying him rushing toward her: "Tumithak," she cried. "Take me. I love you and now I am worthy of you... and I too am a slayer of shelks."

#### CHAPTER VI

#### The Walls of Shawm

THOLURA'S story was soon told. As the flyer had swept toward Shawm, she and the two Yakrans had been drawn up into the body of the machine, disarmed, and thrown unceremoniously into a corner, where they had cowered in terror, wondering what was coming next. The excitement caused

by the news which the shelks in the flyer told on their arrival, and the tumult of the battle which immediately followed, evidently caused the shelks to entirely forget them; and so they remained locked in the flyer all during the fight. Toward the last, Tholura so far regained her courage as to begin a search of the flyer. She went looking around here and there, examined the controls and decided that they were too complicated to experiment with, looked here, there and everyplace in search of some sort of a weapon, and finally, to her surprise and delight, found the very arms which had been taken from them earlier in the day. The shelks had evidently tossed them carelessly into a chest used for storing baggage, and it was here that the girl found them.. It was obvious that here, as all through the battle without, the shelks had under-estimated the intelligence of the men against whom they were fighting, and here, as in the fighting without, they were to pay dearly for their mistake.

Grimly, Tholura strapped the box to her back and sat down at the entrance to await the return of the shelks. When the door opened, she hid herself until the entire party was safely within the cabin, and then she opened fire on them with the heat-ray. The shelks did not have a chance, but in her excitement, Tholura forgot how the use of the fire-hose in such confined quarters would raise the surrounding temperature. She and the two Yakrans also had almost been overcome by the heat, before they could manage to get the door open and escape to the cooler air of the outside.

#### The Battle Was Ended—The Last Shelk Was Killed

B UT now the battle was over, the shelks were dead to the last one, Tumithak and Tholura were united again, and the Pit-men had cheered themselves hoarse when Tumithak announced his intention of marrying Tholura at the earliest opportunity.

Then Tumithak, at Datto's suggestion, allowed the warriors to disband and turned the city over to them for looting; while he gathered together his officers to discuss ways and means of properly protecting the city proper.

Next morning Nennapuss approached the Loorian chief with a very business-like air and asked permission to read a list he had compiled. Tumithak nodded permission and the Nononese cleared his throat, and, in the oratorical voice that was so characteristic of him began:

"This is a list of all the engines and machines that has been captured in the taking of the city. I took the liberty of ordering all men who had obtained these machines to make a report of them, and the following is a summation of their reports. We have secured twenty-seven fire-hoses, which, added to the forty-four which the Tains provided, makes seventy-one in all. We have two hundred and fifty rods of the power metal, a cache of which was found in the tower of the chief shelk. Twenty-six small machines of the type that makes nothing of things, four strange going-machines

which no one can make to go, one machine with strong arms that seems to be made for lifting large objects, one machine to fly through the air, and seventy-two machines of which at present we know not the use."

Tunithak smiled at the formidable list which the chief of Nonone had so carefully compiled, and then

considered seriously for a moment.

"The fire-hoses," he amounced at last, "and the rods of netal may become the property of those who found them. The machines of which we know not the use shall remain in the possession of those who have them until we find out their use. But, the disintegrating machines shall become the property of the council, to be used for the protection of the city. Tell Datto and Zar-Emo to report to me."

The two chiefs came and Tumithak laid before them the plan which he had conceived for the protection of the city. Euthusiastically, Zar-Emo and Datto departed and busied themselves in setting up the disintegrating machines in the manner agreed upon. A huge circle was drawn on the ground all about Shawm and then, at equal intervals about this circle, the machines were set up, and Tains spent some time teaching the use of them to warriors who were assigned to operate them.

FOR a guard, one of the many that Tumithak had placed in the towers and on the higher elevations of land beyond the city, came rushing to the chief to announce, in a voice laden with terror, that a number of great bird-like shapes had appeared on the distant horizon, and were moving rapidly toward Shawm.

"They are shelk-flyers, Tumithak!" he cried in fear. "Let us flee to the Pits at once, Tumithak."

The shelk-slayer silenced him with a stern gesture, and, turning, ordered a messenger to summon the other chiefs. When they arrived he began at once to give them instructions for the defense of the city. Messengers were sent rushing to the guards who maintained a constant watch at the disintegrating machines, others assembled the possessors of fire-hoses in the center of the city, while still others busied themselves with the work of herding the women and children into the Pits, that they might be safe in the event that the battle went against the defenders.

By the time that all these preparations were completed, the shelk fleet (which, although Tumithak could not know it, was probably little more than a group of freighters, ignorant of the conquest of Shawm, which were bringing supplies to the little city from some larger metropolis), had reached a point not over a few miles from the town. Standing on the little elevation near the center of Shawm, Tumithak, with Tholura at his side and his chiefs behind him, watched its approach. The shelk flyers were ornithopters and the lazy flap-flap of the metal wings caused them to flash intermittently in the sun.

On they came, suspecting nothing, until they reached a point but a few hundred yards away from the city and then they began to descend. The clattering hum of their engines could be heard plainly now, and Tumithak began to look anxiously toward the ground beyond the city. Would his plan work, or were the Pitmen about to participate in a desperate battle that would question their very existence?

#### The End of the Fleet

AND then, just when the Loorian had given up hope, came the event that he had been waiting for. There came a splitting roar from the foremost of the flyers, it gleamed momentarily with a brilliant a dazzling light—and then it was gone! There was a clap of thunder as the sound of air rushing in to take the place of that destroyed by the ray reached their ears and that was all.

Tumithak smiled a relieved smile and turned to Tholura.

"The disintegrating machines" he explained. "They have been set up so as to form a huge cone of rays over Shawm through which nothing can pass until we shut off our machines. There is a watch over the machines, day and night, and whenever anything strange appears in the sky, the power is immediately turned on."

He turned and watched the remaining flyers. The main body of the machines, about seven of them, had been flying immediately behind the leader, and had not attempted to stop when the leader was struck. They had no cause to believe that the machine had been attacked from the ground, and apparently those who noticed its collapse credited it to some accident within the flyer.

And so, before they could help themselves, they, too, had moved on within reach of the rays and in less than a minute they, too, had roared into oblivion. One straggler, indeed, managed to avoid the general fate for a few moments, and Tumithak watched it anxiously. fearful that it might succeed in escaping entirely, and reach some distant shelk center from which it could bring an army that would wipe out the Pit-men entirely. But fortunately this was not to happen, the men who controlled the disintegrators, considering it a point of honor to completely wipe out the entire shelk fleet, directed the whole battery of sixteen machines against it and under such a barrage escape was impossible. The last flyer exploded noisily (the disintegrating rays were weak at that distance) and a fine rain of dust over the forest marked the last of the fleet.

The breeze that had sprung up at the moment of the turning on of the disintegrators, and which had grown until it was a brisk wind, died down now, and Tumithak turned to Tholura and gave her a kiss of triumph. Then he gave a sigh of fervent relief, for he had been uncertain as to how this method of defense was going to work.

"We have triumphed once more," he said softly, and then: "But they will come again, Tholura, they will surely come again... But when they do, we will be ready for them."

THE END.

## Warriors of Zantos

### By William Russell Moore

IKE the scintillating jewels from a Martian treasure house, set upon a black evlevt carpet from some Venerian jungle castle, the whole broad panorama of the universe spread out before the two earthlings in the space car. So silently did the perfect mechanism of the car work, that no sound was heard, save the excited breathing of the two fine-featured men in the observatory compartment. They were drifting toward the planet system of a mighty sun; were about to land their silvery ship upon the alien surface of a planet in a sunsystem far from their own familiar Solar System.

"Let us land upon the fourth planet from the star," said Kama, the man at the controls. "It is more suitable to our bodies. Later, perhaps, when we return with more equipment, we may explore the others."

The man at the telescope showed excitement as they drew near the planet. "In all my life," he exclaimed, "I have never seen a more peculiar city! No, not in two thousands years of travel back and forth across the Universe, have I beheld anything so strange."

"What do you make of it, Knir?" inquired the man at the controls. "What type of intelligence dwells on the planet?"

"That is impossible to tell," said Knir. "But upon one half of the planet's surface I see a great city. Built at the pole, it seems to cover millions of square miles. At the other pole, I now see another great city, as large as the first. But they are of such different types of architecture that they could not have been built by the same intelligence. One city is built entirely of conshaped structures. The other is of sphere-shaped buildings. Between the two, reaching apparently around the globe, is a broad band of some metallic substance—perhaps a barrier between the two intelligences. But we are drawing near enough for you to discern with your own eyes, the strangeness of it."

The silver space car drifted above the surface of the planet, a globe somewhat in size as the earth of their childhood. The two hardy adventurers peered out through the portholes at a strange scene. A world that lacked oceans, but which was dotted with gem-like lakes many miles across.

"Let us descend to five thousand feet," said Knir, and the man at the controls set the ship in motion, dropping them swiftly down into the atmosphere, where they cruised along above the broad strip of metal that Knir had seen from out in space.

WHEN near the surface, they could see that it was a broad ring of broken pieces of machinery, like some gigantic junk yard, spead out in a ring ten miles wide, around the equatorial part of the planet. The huge cities, reaching ten thousand feet into the air, were visible from the ship, far in the distance to either side.

"There seems to be no sign of life," said Kama.

"Indeed, it is more eerie than the ruins of Mars when men first set foot upon the desert planet," sighed Knir. "I regret it greatly, for I had hoped to commune with the strange intelligence which built those extraordinary cities."

"Look, Knir!" said Kama excitedly. "A battle is in progress!"

Ahead of them, on the strip of wreckage, or rather amidst the wreckage, a battle was indeed in progress. As the ship drew nearer, the men could see that over a hundred great creatures were locked in deadly embrace. Half of them were red in color, the others were silver-colored, but in form, both were intentical.

Towering over fifty feet in height, they were supported by four flexible legs and four long feelers with mighty knives on the ends, for cutting and slashing.

The pilot switched on the listening device, and the sound of battle came plainly to their ears, increased by the amplifier. There was a continual roar of metal upon metal, crashing and grinding, but no outcries were heard. It was a gigantic hand-to-hand conflict, and as the two earthlings watched, one of the red bodies succeeding in over-throwing one of his silver-colored formen, and immediately he rent him to pieces.

"Why-they're just-machines!" gasped Knir.

"Machines—with intelligence," said Kama. "Surely they could not be operated by remote control! Let us descend to within a thousand feet of them, where we can see them more plainly."

A thousand feet from the surface, the noise of the battle could be heard without the aid of the amplifiers. The machine that had succeeded in destroying its opponent, now raced to the aid of another, which was about to overcome a silver man. That fight was brief for the silver man. Outnumbered, he was quickly destroyed and scattered upon the field.

"Look, Knir," said Kama, "the entire band of wreckage around this planet is made up of these shattered machines! They have fought a battle that reached all around the planet!"

"YES. Now the red men are gaining an advantage. For every silver man that falls, two red men attack another silver man. Look, the silver men are outnumbered almost two to one!" said Kama.

"I dislike to see the red men win," said Knir. "I propose that we aid the silver men. The disintegrator will even the numbers,"

"Bring it into play then," said Kama. "We will aid the silver men."

The bright red flame of the ray played upon the field of battle, narrowed to a pencil-like streak. As it touched the red men, they became shattered bits of dust, and at last the red men were less in number than the silver men.

"Thy have not even noticed us," said Kama,

"But look!" cried Knir. "The silver men are overpowering the red men now. They seem to be equal in strength until one is destroyed. Two to one, the small side has no chance!"

"There goes the last red man," said Kama at length. "Perhaps we should have aided the red men after all," he added thoughtfully.

"At any rate, let us descend and question these strange creatures," said Knir. "Made of metal, though they are, it may be that some intelligent entity sits within their metal bodies and directs them-else they may be reasoning machines, who knows? Machines have been produced upon the second moon of Saturn which rival men in reasoning ability."

"Hold!" cried Kama. "The silver men have turned and are attacking one another!"

"Even so," observed Knir, "What strange fancy causes this?"

"Machines created to fight," said Kama, "will turn upon themselves, when the object of their hate is destroyed. "Let us observe them closely.

For another hour, the battle raged, and the men in the space car scarcely breathed, so intent were they upon the circus of destruction below them. Finally, only one battered machine remained.

Like a man befuddled by the intoxication ray, the great machine stood there, looking about the battle field. Seeing one long metal tentacle waving in the air, it ran quickly to it and wrested it from the socket of the metal body, whirled it high into the air and snapped it into two pieces. Then, as though in great anger, it turned and ran toward a towering rocky cliff, twenty miles from the battle field.

"We will follow," said Kama,

THE space car sped along behind the racing monster, checked its speed as the cliff drew near, to see what the monster might do. As though devoid of sight, the monster never slackened its pace, but ran straight to the rock and hurled itself against the stone.

Shattered metal burst into fragments and flew about over the ground, and soon, the last waving tentacle subsided into a coil and all was silent,

The astonished men in the space car looked at the

wreckage for a few moments, when they turned the car and went back to the battle-field. No sign of life was visible anywhere, and they quickly straightened their course to travel around the planet, along the band of wreckage. Nowhere along the whole battle-front, could they find a single moving thing.

At last they went to the city of the cones and landed at the base of the center tower, the tallest cone of the

No sign of life was to be seen in the place and they disembarked to enter the building. The great doorway seemed made to admit the mighty machines that they had seen in their last desperate struggle out there upon the plain, and they gripped their weapons tightly, fearing that they might meet one of them inside the massive structure.

The city, however, was deserted, as was the building in which they were, and they were about to go, after examining the mysterious sculpturing about the walls, when Knir found a small square of metal, covered with tiny heliographs.

Taking the metal tablet back to the ship with them, they left the cone city and flew to the city of the spheres.

Like the cone city, this one was deserted, and built to gigantic proportions, to accommodate the huge forms of life that had inhabited it. Once more they discovered a small metal tablet with peculiar heliographs engraved upon it, and taking it, they returned to their

In a few days they had refueled their ship, renewed their supply of air and water, and were once more out in space. Controls set for the solar system, they began poring over the tablets which they had found.

The messages, when interpreted, read the same, excepting that the names were reversed.

"WE, the vanishing race of Zamins, have been fighting with the blasphemous race of Xons for many centuries. All Zantos is reduced to a complete and deadly war-machine. But we, the Zamins, are vanishing from the face of Zantos, so we have produced a fighting machine in our own likeness, a machine which will not stop until it has destroyed every Xon in sight. Many millions of these machines are we building, and they will spread around the equator of Zantos, to carry on our fight, for shortly, our race will be completely destroyed by the deadly disease which has attacked us. We believe this disease to be the work of the Xons, and to keep them from destroying out great city, and building their own hated sphere dwellings, we will cause these machines to fight for the true architecture."

"Each race then, did the same thing at the same time," said Knir. "The disease evidently attacked both at once. Each thought it the work of the other. Such strange psychology of mind! What peculiar twist of their brains led each to attempt a different type of architecture, and finally to war over it?"

"No one knows," said Kama, "Great Jupiter!" he exclaimed later. "We witnessed the end of a fight which may have been going on since before men of the earth began to explore the universe!"

"Beyond a doubt," said Knir, "And it might have gone on another few thousand years, were it not for what we did. As it was, we saw the end!"

"The end of a battle between two races of beings dead for aeons," said Kama with a shake of his head, "Tomorrow we descend upon the outskirts of the solar system."

Peace, Kama."

"Peace to you, Knir," returned Kama.

## The Intelligence Gigantie

## By John Russell Fearn

THIS elaborate and engrossing story holds the attention of the reader in the firmest possible grip. The Intelligence Gigantic operates to exceed that of the wisest of humanity and the strangest results are brought about by it and the plot will be found crowded with incident. The reader will be kept in suspense till the very end. The super human intelligence easily takes the lead over mankind at large, and the monster, as he may be called, is virtually without morals and simply embodies pitiless intellectual power making him a dreadful despot. We stop here, although we could say more. We leave it to our readers to study out the strange conditions that may be brought about by great intellect uncontrolled by the morality of the every-day world.

#### Illustrated by MOREY

CHAPTER I

#### Differences of Opinion

HREE men stood quietly thoughtful in a wonderfully equipped laboratory, each holding in his hand a sheaf of papers upon which were executed abstruse mathematical formulae, and sections of the human anatomy, correct to an amazing degree. . . .

The tallest of the three, Doctor Albert Soone, Professor of Chemical Research—a tall, broad-shouldered man of perhaps forty-three years—studied his own papers silently, his lofty forehead wrinkled into furrows of thought, his steel-grey eyes abstracted. The black hair seemed a triffed isordered. . . .

Next to him, equally absorbed, was a much older man, possessing a far kindlier face, less severely chiselled—Professor Peter Ross Master of Anatomical Research. . . .

The third member of the group, David Elton, an exceptionally well-built young man with riotous fair hair, china-blue eyes, and a square, purposeful face, stood watching his seniors attentively, his hands sunk in the pockets of his laboratory smock. . . .

pockets of his laboratory smock....

Presently Dr. Soone laid down his papers on the bench and regarded his two companions meditatively.

"Well, Dave," he remarked at last, after a profound cogitation. "You certainly have found something! Congratulations!"

The words were curtly spoken, in a cold voice. Dr. Soone never enthused over anything, no matter how extraordinary; not for nothing had his contemporaries dubbed him as "cold-blooded."

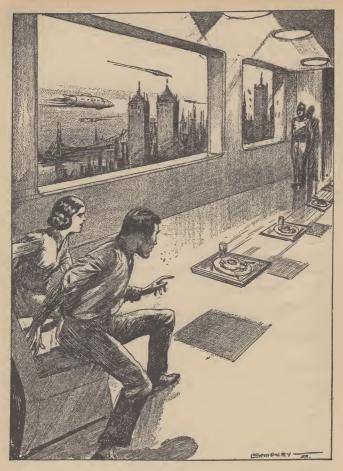
"Indeed yes." Professor Ross put down his papers and laid a kindly hand on the young man's shoulder. "My boy, you have undoubtedly discovered something that will raise our race to enormous heights of genius—which will enable us to grow out of our rut of comparatively groping intelligence. Your formula for the creation of a synthetic being, endowed with the power to use its brain to full capacity, should mean an intellectual Titan, dwarfing the most brilliant minds earth has ever evolved."

Dave Elton smiled slightly. "Thanks, Professor. Yet, although I managed to conceive the idea, and work out the formula, I couldn't hope to undertake the task alone. My knowledge of anatomy and chemistry is too slight. That, of course, is why I asked you two gentlemen to become partners with me in giving this creature to the cause of the world's progress."

"Quite," the Professor nodded. "You may rest assured of our most earnest cooperation. Eh, Doctor?"

"Most certainly," Soone agreed; then turning to the young man, "Tell me, Mr. Elton, what started this train of thought? What led up to this startling formula of yours?"

"Well," Dave began, his manner becoming retrospective, "during my college days—I have said already I left about two years ago—I had access to a considerable number of medical books, including 'Anatomical Research,' De Sevene's 'Theory of Brain Action,' and several others, from which I gleaned positive information that almost every human being has five times as much brain material as he ever uses. It occurred to me that this was odd: why so much waste material? We have ascended from a lower level of creature, according to popular theory; therefore that extra brain-ma-



Five gleaming trays, upon which reposed an ample sufficiency of food and drink, floated into the room. They traveled on the air itself in a long line at first, then they broke up into units and became stationary before each of the captives, at lap level.

terial is certainly not a sort of 'left-over' organism from a more highly developed creature. Is it for future use? Of course we do not know."

#### Unused Brain Material

"BUT, gentlemen, Nature does not make mistakes constructing millions of beings with the same brain capacity—therefore, what is missing? I had a discussion with my anatomy instructor over this excess of brain-matter, and between us we found that it is very likely our brain-capacity will always be the same—and remain unchanged far into the future, but, and here is the point, with the passing ages we will become so intellectually perfect that our brains will need use for all the material—but the time is not yet. You follow?"

The two men nodded in deep interest, their eyes chained to the bright-eyed young genius before them.

"Well, at the risk of being thought a 'preacher' I'll explain the rest," Dave went on. "I went further into this brain study of mine, made investigations on the mysterious cerebal cortex, studied all about the corpus callosum, which connects the two hemispheres, and pored over the action of nerve-impulses. I just metaphorically dissected a being-and studied him as an engineer studies a delicate machine-to try and find out how the most power could be gained from that extra brain-tissue. I found it was impossible to experiment on a living being, no matter how skilful the surgeon, without causing death. You see, what is lacking with our brains is a nerve connection between the portion of the brain we use and the so-called useless portion. We only think and receive impressions in snatches, imperfectly understood, but-and this is the vital point-with a nerve connection to make the entire brain of use, we can operate our brain power to the full! It means a power of thought five times greater than we now have. On that basis I built my formula, which you, Dr. Soone, find to be correct?"

"Perfectly," the famous surgeon and neurologist nodded.

#### A Synthetic Man Proposed to Use the Brain Material

"GOD! Well, as I have said, I found it impossible to experiment on a living being because of
death. Even if the being should live after the operation, it is possible that this sudden excess of work on
the part of the brain might cause such a weakening of
the body's other organisms as to bring about death
from exhaustion. The only thing, therefore, is to create a synthetic man, built with nerves to stand such
immense brain-power—comect up all his brain the way
I have outlined, and there he is! An intelligence gigantie! This is your province now, Professor Ross.
What we have to do is to duplicate the elements of a
human being, and, in a sense, duplicate protoplasm—
also reproducing the substance in the nucleus of the

body cells—chromatin. Of course, Professor, that part of the business lies with you. I do not know how to reproduce the elements of a human being, or how to endow those elements with the power of life. I have given it as far as I can in my formula, and have shown exactly what organism will have to take the strain of excessive brain power . . ."

The Professor nodded, and deeply thoughtful again studied his papers,

"There is nothing impossible in it, my boy," he said at last, looking up, "but it will take me a little while to prepare the details."

"Of course," Dave nodded. "Time is no object. None of us can work independently of each other. And if this synthetic man is a success it will herald the dawn of a new era! The era of super-intelligent beings! Our intellects will be much beittled by the beings we create, but what of that? If it advances progress what else matters?"

"Have you considered, Dave, that this proposed synthetic being will be—soulless?" asked the Professor quietly. "We cannot make a synthetic soul."

#### The Question of a Synthetic Soul

"I THINK that fact can be discounted," Dave answered. "Soul, in my belief, is nought but the name for certain emotions all occasioned by the braingood emotions, I consider, are just as natural as, say, the respiratory organs. This being of ours will be both soulless and sexless in the real sense of the word—yet I am willing that he shall have no more tendencies towards cruelty than his natural, less intelligent counterparts."

"Hmm—maybe," the Professor assented with a shrug, but his grey eyes reflected a shade of doubt. "It, of course, remains to be seen."

"I support Dave's view," said the Doctor methodically. "I also believe that the various sentiments we attribute to an enigmatic 'soul' are really only normal bodily impulses—as yet imperfectly understood."

Ross shook his head. "I just can't see it that way, my friends. Soul is God-given, not to be tampered with by the hands of man. Nature has set the seal of invisibility upon soul—no man can understand or interfere with it. It is shielded from us by an unbreakable barrier of Godlike purity. It is an—an infinite 'something' we all possess in a greater or lesser degree. But of course"—he smiled slightly—"my views need not enter into this matter."

"They certainly will not, Professor," remarked Soone coldly. "We have too much before us to allow personal opinions to influence the matter in the slightest!"

sonal opinions to influence the matter in the slightest!"

Ross looked surprised for a moment, then he shrugged indifferently.

"Suppose we leave it at that, then?" Dave said, looking at his companions each in turn. "It will take you both a little while to work your respective systems out —and, of course, this laboratory of mine is at your disposal to serve for whatever you wish, and whenever you wish. I will acquaint Jesmond with that fact, and he will make arrangements for you both to have admittance whenever you desire it. . . . When shall we meet again to officially discuss the final details?"

#### The Final Details

"T SHALL be ready in-a week," replied Ross, musing. "I have a great deal to work out, but I think a week will amply cover it. How about you, Doctor?"

"Quite suitable for me. We'll call it seven P. M. this day week, shall we?"

"Right!" Dave responded. "And let us hope for success, gentlemen."

"There is no reason to anticipate failure, Dave," Ross said confidently. "Between us we will create a mastermind-or, as you have said-an intelligence gigantic!"

After the two scientists had departed Dave Elton went slowly and thoughtfully towards his library, his mind turning over all that had been done and said during the past few hours. He paused with his hand on the library door as Jesmond, his one man servant, came towards him in characteristic swift silence.

"Miss Conisbery is in the library, sir," he announced smoothly. "She came about half an hour ago, and when I informed her that you were engaged in the laboratory she said she would not disturb you, and decided to wait."

"Very well, Jesmond, thank you. Oh, by the way, it is highly probable that Dr. Soone and Professor Ross may frequently come up to the laboratory,,

"Even if I am absent, please allow them perfect liberty to use everything here."

"Certainly, sir. Will there be anything further?"

"No, not at present. Thanks." Dave entered the library, extending his hands in greeting as a girl of about his own age rose from the armchair by the fire and came quickly towards him with a tripping step.

"Dave Elton, you have kept me waiting half an hour!" she exclaimed in mock reproof, as he cupped her two hands in his.

"What have you got to say for yourself after forgetting that I was waiting for you?"

The young man laughed, then he quietly studied the girl for a moment-the deep violet eyes and extraordinary golden hair, the straight, aristocratic nose and sensitive mouth, with the determined little chin, entirely devoid of dimples, giving a suggestion of strong will and certainty of purpose.

"Nan, do you mean to say that after three years you still pull me to attention when I have important business on hand?" he asked sternly. "Shame on you, child!"

"Well, am I not important?" she pouted at him. "If you behave like this when we've only been engaged three months, what are you going to be like when we're

Then, unable to restrain themselves, they both burst into laughter.

#### The Visit of Miss Conisbery

OGETHER they went over to the settee and sat down

"Well," Dave asked, putting his arm about her shoulders, "and what brings you here. Nan?"

"Purely the fact that I was passing on my way up to town, so I though I'd call in and discover how your mysterious secret is progressing," she replied a trifle vaguely; then smiled disarmingly. "Tell me. Dave, what this secret is-please!" and the entreaty she succeeded in putting into her unfathomably blue eyes destroyed all the reserve Dave ever possessed.

"I'm sorry, Nan, if I've not revealed anything so far," he said contritely, "but to tell the truth, I had to be quite sure of the co-operation of two famous scientists before I could say anything."

"And have you got that co-operation now?" "Yes-that's what I was doing this afternoon. You've

heard of Dr. Albert Soone and Professor Ross?" "Yes-but- What on earth have you discovered.

Dave, to require the services of such men? I know you're wealthy, but-Don't their fees run high?"

Dave laughed heartily. "Bless your heart, Nan, they're only too glad to help me-gratis. You see, we three are now going to work together in turning a theory of mine into a possibility. Namely, old girl, we're going to create a gigantic intellect-a human being, but with a brain of tremendous power."

"A-a what?" the girl repeated, obviously startled,

looking at him with wide eves.

"A synthetic being, Nan-the first living creature to be born independent of another human being-a creature of flesh and blood like you or me, but with an intelligence exceeding yours or mine five times over. You see, it is like this . . ." and he went off into one of those moods of technical fecundity for which he was remarkable.

When he had concluded the girl sat in silence for a time, and Dave fancied he saw her face harden slightly. Surely, he reflected, it must have been a trick of the dancing firelight. Her next words astounded and completely disillusioned him. They fell upon him like sudden ice and robbed him of every conception.

"Dave, I never thought you capable of such a thing!" she said, and her tones were low and cutting. "Whilst I admit your brilliance, your undeniable genius, in conceiving such a being with a super-intelligence, you have forever destroyed my faith in you as a goodliving, right-thinking, honest young man! What you have planned, and what those two scientists have agreed to, is blasphemy! I do not hesitate at saving it!"

"But, Nan, if only you-"

"Let me finish!" the girl requested stonily. "Science is undoubtedly the mainstay of human progress, but when it comes to creating living beings, and endowing them with an intellect beyond that planned by Nature, it is grotesque. You have no right to do it!"

"I don't see why not!" Dave returned obstinately. "It's for the advancement of the human race."

"You are so blind as that!" Nan exclaimed in amazement; then she shook her head slowly. "Then I may just as well save my breath, Dave. If you must have your science, Nature at least ought to escape your dabbling hands. You're going to create a monster, Dave—in all seriousness you are!"

Dave did not answer.

#### Dave Has a Difficult Case to Plead

"INTELLECTUALLY colossal, I know," she said quietly; "but at the cost of a soul it's not worth it."

"Like Frankenstein's monster ch?" Dave asked drily.
"You've got the old idea into your head that a laboratory-made creature must be without a soul. I don't
believe that at all . . . Nan, why can't you leave it all
to me? What has my work got to do with all we have
in common?"

"The work you do must, of necessity, reflect the character you possess, since you do that work from choice," the girl answered, looking away. "As a man, you probably think you are justified in what you are doing—but to me, a woman, your plans seem vile. You propose breaking the very laws which govern life. . . ." Quite abruptly she rose to her feet and straightned her costume. "No, Dave," she said firmly, "this finishes everything between us. I cannot have anything in common with a man who seeks to create an intellectual monster. My whole woman's being cries out against it!"

Dave was on his feet now. He seized the girl's slim shoulders in broad, powerful hands. "Do you mean that you leave me—leave me flat, as they call it—if I go on with this work?"

"I do, Dave." The purposeful face was set and determined. "Do not imagine it is easy, Dave. As a man I love you with all my heart and soul—but as a scientist, I hate you! It's either I or science. Choose."

A silence fell between them. Dave's face reflected in turn all the emotions of a man passing through an intense mental struggle. Then with a sudden curious gentleness he dropped his hands from the girl's shoulders and looked away.

"I cannot back out now, Nan," he said hopelessly.
"The whole scheme is launched—like a machine in which the cogs are moving and cannot be stopped. And anyway"—his tone took on fierceness and the blue eyes flamed—"I consider I've been mistaken in you, Nan! It's your sort that forever hinders progress and drops stumbling blocks and barriers in the path of progress. Instead of standing by me and helping me, all you can do is to air your own petty views, and claim priority because you happen to be a woman. Well, you can get on with it! My Intelligence will be created, and when you see the benefits that follow you'll come and ask me forgiveness..."

"Quite well recited—and you flatter yourself, too," the girl returned with polished acidity. "That Intelligence of yours will bring only destruction. Good bye." She swung round on her heel and made for the door.

#### The End of the Discussion

"BUT, Nan—" Dave exclaimed hoarsely, dazed by her sudden departure and the infinite coldness with which she was taking it. "Nan! I didn't mean all of that—" He stopped dead as the door slammed behind the girl's unheeding ears. . . .

The same evening, by the last post, a locally-stamped letter arrived for Dave. Moodily he tore the flap, and from the envelope extracted a narrow circlet of gold, with three bulging diamonds clawed thereon. A little slip of notepaper, emanating the faintest hint of an elusive perfume, bore upon its delicate surface the following words. . . .

"Remember, I still love David Elton the man but I hate, loathe, and detest David Elton, the scientist. You know what to do—until then I refuse to even hear from you!

"Nancy Conisbery."

Quietly Dave put the ring in his wallet, smiled faintly and dejectedly at the little note, so small yet so powerful—then, with a sudden unreasoning savagery he
kicked the footstool at his feet and flung the wastepaper
basket across the library.

"Dave!" he breathed hotly. "What a damn fool you are!"

#### CHAPTER II

#### The Making of the Intelligence

FEW days of comparative idleness, a moody reflection on his own shortcomings and brutal outspokenness, then Dave Elton was back again at his work, having, as he believed, successfully steeped himself so deep in his scientific pursuits that the thought of Nancy Conisbery did not create the slightest fluctuation in his mentality. He viewed her as a girl with oddly perverted ideas, as an annoying distraction in his efforts to progress, as one who claimed first right because she was a woman. He grunted as the unbidden vision of her obtruded through the accumulating mass of mental, scientific facts-he almost cursed aloud as unconsciously he went over that last interview with her in his mind's eye. Each time, it seemed, he saw himself more objectionable, more ruthless, more of a machine than a man. . . . There were even times when he debated the fact that she might have seen further into the future than he did when she foresaw the Intelligence as a devouring monster and a destroyer of all cherished attainments and rosy ideals. . .

"Bosh!" said Dave harshly, and turned back to his interrupted work, only to trail off in absent-minded contemplation of the small circlet of gold he had taken from his waistcoat pocket. . . .

Right on time, one week later, Dr. Soone and Professor Ross arrived—the Doctor as saturnine and curt as ever, whilst Ross was as mildly enthusiastic as his mature years permitted. In the laboratory he made his conclusions clear.

"Rather contrary to your beliefs, Dave, we have not reproduced protoplasm, but rather the elements of a human being," he said sonorously, as though delivering a lecture. "By the blending of the elements and atoms that make a human being we have, as it were, the framework of our experiment. Next, we have to reproduce the same chemical element, the same reaction, that started life on this planet of ours. As our synthetic man takes on shape we can strengthen those nerves which will take the strain of tremendous brain-power, and so, finally, by linking up all the brain-cells, complete our creature. My calculations-here they areshow that metabolism will be extremely rapid. Within a month or six weeks our man will have evolved from the first elements to adult life-only differing in three ways from ourselves-his enormous range of thought, his complete lack of sex, and his absolute absence of -soul!

"Actually to set up all the material necessary should not take more than five hours. Afterwards, it will be just a case of tremendous, unceasing growth, as he swells from babyhood to maturity. We could make him grown up right away, but I don't altogether hold with that idea. Going from the lesser to the greater he will have the time to develop his faculties and enormous mental resources. Food he will have to get in plenty, in order to replace the enormous waste occasioned by such tumultuous growth. After all, there is no reason to suppose but what he will eat like you or me. That, I think covers everything."

"What do you propose to create him in?" asked the

#### A Glass Case for the Synthetic Man

"A GLASS case, shielded from the air of the laboratory, and heated in the interior to 98° Farenheit," the Professor replied. "As he grows, the temperature will be lowered until it equals that of our own air."

"What sort of glass?" Dave inquired. "Why glass at all?"

"Merely ordinary quarter-inch glass, but the case must be made to design. The reason for using glass is so that we may see what is transpiring inside. Another reason is, so that the special combination of rays we shall use, to excite the chemical reaction, will pass through."

"Suppose our creature does not evolve into a man, but something else—say a dog—or even an unfathomable monstrosity?" the Doctor enquired. "What then?"

"It is very unlikely," returned Ross. "In every detail we are supplying the elements which go to make a human being—whereas the elements of a bird, animal, or fish, are quite different. Nearly all human beings have two legs, two arms, and a trunk—the body such is the outcome of the conditions of our planet. Even if by some mischance our creature should show signs of becoming something hideous, we have simply to create synthetic parts to replace the wrong ones."
"Only one thing puzzles me," Dave remarked. "At

"Only one thing puzzles me," Dave remarked. "At this rate, our creature will be no more intelligent than we are."

"Evidently I have not made myself clear. The brain of this creature will be placed in position as soon as the elements take on form. That will be the Doctor's task. That intellect will have to be connected up in much the same way as a radio engineer connects a wire-less anoaratus."

"During that process then, I take it that the rays causing chemical reaction will be cut off, and the creature will cease temporarily to grow?"

"Exactly. When the Doctor has completed his task growth will resume its course."

"But, until it is taught it will not understand anything," Dave objected. "We hadn't considered that."

"It will not require teaching, anymore than a real infant needs to be taught to cry. It will read and learn by studying our minds. And it will easily have the power to do it. After that, it's just a case of accumulating more and more knowledge."

"I see. And what will be the nature of the rays to cause the chemical reaction?" Doctor Soone asked, in his level voice. "Duplication of solar rays? They, obviously, are the root of our life."

"The point is, are they?" said Professor Ross broodingly. "In the dim ages of the Beginning, how do we know that it was solar power that started life? Some condition of earth itself might have done it. . . I have not yet solved that problem—the most vital problem of all. We cannot excite life in lifeless atoms and molecules, until we know what reaction does it. I shall go over my equations again and try and evolve the right formula. We have everything . . but that."

. . .

It was two days later when the three met again.

"I believe I have it!" declared the Professor triumphantly. "You were right, Doctor Soone. Solar rays are responsible for the evolution of protoplasm—but only certain of those rays."

"I could hardly conceive of anything else being the reactive agent," returned the Doctor coldly.

"The rays, I believe, which cause the reaction, are those which contain a high percentage of electricity, which disrupt the atoms of matter and release the power known as life. Two other rays are also indispensable—one is in the ultra-violet. As this loses its power when passing through glass we must arrange for a direct beam. The other one is of a frequency below ultra-violet, whilst the electrical ray itself is above ultra-violet. The combination of all three, my calculations tell me, should create lifet Lifet I we will start about equipping a ray-machine right away. When it is finished we'll test the rays on some of our material. If it releases the chemical reactivity, we're well on the road to success. Come, let us make plans—for the ray-machine and the special glass case. ..."

#### THE INTELLIGENCE GIGANTIC

A Fortnight of Feverish Activity of the Three Associates

FORTNIGHT of feverish activity followed on the A part of these three scientific men, who sought to improve a world deficient in intellectual attainments. Having, as it were, a definite line of action upon which to work, they laboured with that curious tirelessness common to the scientific profession, until at the end of fourteen days, weary at last with the strain they had concluded the manufacture of the Ray-Machine, of the special glass case, eight feet long by three wide (with an orifice in the side for the insertion of the Ray-Machine's ultra-violet quartz lens), and the manufacture of artificial protoplasm. This latter contained mainly haphazard elements and gases. It might evolve into anything. The Professor had not concerned himself with duplicating the elements of anything in particular for the first experiment.

Doctor Soone looked at the small mound in the base of the glass case, and then at the Ray Machine, the lenses on its snout-like front pointed towards it.

"Proceed, Professor," he said in level tones. "Ready, Dave?'

"Absolutely!" Dave returned tensely.

The Professor's hand trembled slightly as he threw in the switch of the machine. A pale violet ray, fringed along its edges with the remotest suggestion of yellow, sprang from the central lens and focussed upon the little heap in the centre of the case . . . In a far corner of the laboratory the generators of the Ray Machine hummed rhythmically . . . In his usual methodic, precise fashion the Doctor inspected the thermometer and air pressure gauge on the side of the case, and pronounced them satisfactory. Then hands in pockets, he turned his steel-grey eyes to a silent contemplation of the substance within the case.

For fully twenty minutes nothing happened. Professor's face became a study in suspense and concentration of effort; Dave's frowning and intent; whilst on the hard visage of Soone there lurked the incipiency of a sardonic smile. . . .

Then all three suddenly sprang to attention and stared fixedly. The mound had moved . . . jumped! It was twitching, like some phantasm of a nightmare. The Professor breathed hard as he played the rays uncreasingly into the case.

Time passed on, and with astounding rapidity the substance grew and enlarged, until finally it was a perfect oval. It pulsated steadily.

The Synthesis of the Man Begins to Show Life

WITH an inarticulate exclamation Professor Ross shut off the machine.

"My God!" he muttered. "It lives!" For a moment he felt like one who has committed some diabolical

The oval having ceased to grow, lay like a cocoon on the floor of the case. The distinct beating of some

Bought, Sold or Exchanged. hidden heart was evidenced by the steady and deliberate pulsation on the tight, hairless skin of the Thing

"This-this seems incredible!" Dave almost whis-

pered. Then he suddenly looked up, startled. "It's

stopped pulsating! Yes! Look!"

"Exactly," nodded the Doctor calmly. "For the simple reason that it has been starved. It should have been nourished as we proceeded, Professor. Injections should have been given. We must guard against this when we create the Intelligence."

"Yes. Indeed we must," rejoined Professor Ross.

The Professor spoke slowly and absently. He seemed a trifle dazed by the amazing thing his hands had perpetrated. Yet there could be no doubt about it. The combined immutable laws of chemistry, physics, and mathematics could not lie. For a long time he stood gazing down at the now inanimate, shapeless thing.

"Well?" asked the Doctor at last, somewhat curtly.

"What's troubling you now, Professor?"

"Just the fact that the Intelligence will have no soul," the elderly scientist replied quietly, dubiously shaking his head. "Somehow, I have a feeling that we are meddling in affairs that will prove too much of a handful for us."

"My-er-fiancée broke our engagement for the same

reason," Dave remarked somberly.

"She did!" The Professor shrugged and looked broodingly into the glass case again. "A woman's intuition often reaches further than all the forecasts of science. Dave."

"Rubbish!" snapped the Doctor impatiently. "Have you never heard of conservatism?-that sense of unconscious obstinacy-which refuses to credit anything a little removed from the conventional? That is all the views of your fiancée amount to. Dave. To make a success of this experiment we cannot afford to allow any adverse opinions to deter our purpose."

"I'll thank you, Doctor, to leave my fiancée out of the argument," Dave returned in a quietly firm voice. Soone shrugged his shoulders indifferently. "Pray

accept my apologies, Dave, for anything I may have said, which offends your-er-naturally sentimental emotions towards your fiancée. I do not imply by that, however, that I do not mean what I have said. I did mean it. We have got to look at this matter squarely. We cannot back out now."

"I, for one, have no intention of backing out," said the Professor with dignity.

#### A Slight Threat of a Dispute

"TUST as well," Soone commented in an off-hand J fashion. "If you do back out I shall be compelled to make the Intelligence on my own account. Remember I know the full formula."

"I am aware of that," the Professor returned drily. "As I have no intention of backing out, however, we had better make our plans for the creation of the Intelligence itself."

"It would perhaps be as well," Soone acceded,

At precisely three o'clock the following afternoon, January 19th, 1938, the creation of the Intelligence commenced. . . .

The differences of opinion that had characterized the earlier experiments seemed swallowed up now in the dawn of the miracle. . .

In the base of the glass reposed the substance which, according to formula, should evolve into a human being. When everything was finally in order the three relapsed into dead silence. Quietly the Frofessor switched on the Ray Machine, and, as before, that pale violet ray fringed with yellow impinged upon and held the substance in the base of the case.

Dave shifted somewhat uneasily and watched intently. The Doctor carefully looked over the organic compounds and liquids that were to be used in the nourishing of the creature. Only the throbbing generators disturbed the aching silence.

Minutes passed—minutes of such infinite and appalling suspense as the three had never experienced in their lives before. . . . Then, suddenly, the incredible happenings of yesterday! The substance moved, gyrated in an astounding fashion, came to rest, and commenced to swell, slowly but perceptibly. . . .

It took on outlines.

"Feed it! An injection, Soone!" panted the Professor, and shut off the machine for a moment.

The Doctor instantly obeyed, performing the operation by using a syringe through india rubber vacuum traps in the case, which, whilst permitting room for his arms, stopped all exit of the case's inner air, or any extrance of the outer air. . . . .

#### Progress of the Synthesis

THE work went on. Slowly the growth of the creature continued. By gradual degrees the substance changed from complete shapelessness into understandable formation.

It became manifest, as time passed, that work would have to go on ceaselessly for fourteen days at the least, therefore a hasty scheme of shifts was decided upon. Dave gave the necessary instructions to the unmoved Jesmond and accommodation was arranged. . . .

The next day the creature had formed. Perpetual injections alone kept this mite of synthetic matter alive. . . . With growing wonder at the fantastic thing they had done, the three scientists silently viewed the crea-

ture from time to time. . . .

On the fourth day the Doctor performed the delicate operation of providing the creature with the synthetic brain. With the skill of a master-hand he connected up the vital nerves and cells, and provided the communication to the large "waste" itsus from the usual brain section. . . . After that, the creature just grew . . . and grew!

A week later the temperature of the case was lowered to that of the laboratory. The ray still played upon the creature—but now it was, to all intents and purposes, a normal child of perhaps twelve years old, with perfect physique and extraordinary development of forehead. The eyes of the creature were a deep and lustrous black and had already taken on a quality of extreme penetration. To meet the direct gaze of the creature caused strange mental perturbations in the minds of the three scientists. It seemed as though intellectual power had been sapped from them—and, in truth, it had. From their minds the astounding creature was learning all the knowledge that it would take many long years to even teach an ordinary child. . . .

"He's going to be a super-genius," muttered the Professor, on the ninth day. "I almost feel we've been

justified, Soone,"

"I know it," the taciturn surgeon answered. "Nothing will ever convince me otherwise."

#### A Super-Genius Is Expected from the Synthesis

"AND I, too, think Nan must have been mistaken," murmured Dave reflectively. "I do not credit, gentlemen, that I got the idea for this creature, unless it was intended I should develop it. We are going to give to the world a wonderful intelligence, who will set our differences in order."

"We trust so," assented the Professor, but that same doubting tendency crept unbidden into his tone. . . .

After another six days had passed the finished product of three brilliant minds stepped forth from the glass case, and was duly supplied with suitable attire....

The Intelligence stood about five feet eight inches tatl, with broad, though not unusually massive shoulders. In every detail he was perfectly formed. The face was singularly square and expressionless, ivory white—the lips were thin and set in an even, straight line.... Black hair, smooth as silk, lay flattened back from a forehead of amazing width and height.

From every aspect it was a face that portrayed nothing more or less than cold, ruthless calculation and absolute barrenness of all sentiment. It had upon it the unpleasant stamp of incarnate materiality. In some inexplicable way it reflected the government of a man's hand; there was a complete absence of even that vestige of compassionate insight discernible on even the cruelest human face. . . . . .

The Professor regarded this iron visage almost sadly. A light of disappointment crept into his thoughtful eyes. It was as though he viewed something entirely different from what he had expected, something unspeakably repulsive, something bearing the irremovable mark of the beast.

The Doctor was placidly complacent; Dave somewhat thoughtful and detached, as though unable to reach an opinion. . . Somehow the Intelligence did not please him. The quality of ruthlessness and materiality embodied in the creature was oddly revolting. The delicate, inimitable touch of Nature herself was missing. All the crudities of a man's hand and the non-intelligent products of a laboratory were reflected in this, the first synthetic man.

#### The Synthetic Man Speaks

E ACH of the scientists still found it difficult to look for more than a few moments at a time into the creature's profound black eyes. In their abysmal depths smouldered a peculiar green fire, akin to that in an animal's when seen in the gloom.

"Gentlemen," said the Intelligence at last, in a slow, unemotional, completely mechanical voice, "you have created me from artificial products, and by artificial means. You have endowed me with an intelligence five times greater than your own. From your minds I have already discovered the entire state of this planet, and the so-called intelligence of the beings which populate it. In addition, I have read and can speak every language on this earth. Your highest mathematical computations are extraordinarily childish and really quite amuse me. All that the intelligence on this planet has ever conceived I mastered whilst in the creating case, and have gone much further! Really, you are all very low in the scale of intellect."

"We know that," returned the Doctor steadily; "but kindly do not forget that we had the intelligence to

create you!"

"I have not forgotten that," returned the Intelligence in the same steely tones. "It was a childish task. Obviously you had only to duplicate your own body elements, evolve same by ultra-violet and Z-rays, and then constantly inject organic compounds. Childishly simple,"

"To you, maybe," Soone replied. "To us—difficult."
"I wonder if I may test your intelligence?" Dave

asked, rising from his thoughtful contemplation of the creature.

"You may ask what you please," the cold voice an-

"You may ask what you please," the cold voice answered. "I have already read your questions from your mind—but proceed."

#### The Astonishing Cold Intelligence— The Fourth Dimension

"WELL, simple ones first. I have a watch in my pocket which you have never seen. What is its number?"

"4613912," answered the creature instantly. "Slightly marked on the glass, solid gold, bequeathed to you by your father, Daniel Elton."

"Correct. Now a few teasers. What is the fourth dimension?"

"The fourth dimention is the velocity of space, which subdivides into the fifth and sixth dimensions. In all there are eighteen dimensions to the universe. I will work them out for you—"

"No thanks," Dave interjected hurriedly. "What is the 'velocity of space,' anyhow? I'm a scientist, but I've never heard of that."

"You would not understand it. This is the fourth dimension——" and so saying the intelluctual Titan stepped aside, and vanished!

"He's gone!" ejaculated Dave hoarsely. "Quick, we must—"

"Wait!" came the familiar metallic voice from the airsteff. "I am in the fourth dimension, and, should I choose, I could move backwards and forwards in Time, which is in relation to it at right angles. Time is the fifth dimension, and the composition of Time is the sixth dimension. As all are purely mathematical concepts I doubt if you can understand it . ." Followed a vague thudding noise and the Intelligence was before them again.

"You see, gentlemen, the knowledge of how to enter and leave the fourth dimension is extraordinarily simple, Let me work it out for you in equations."

"It would be quite useless," returned the Doctor quietly. "What is child's play to you in mathematics would baffle us completely."

#### The Synthetic Being Wants to Improve the World

THE Intelligence shrugged. "Very well, gentlemen, Regrettable, but evidently unalterable. . . . I must leave you all shortly and go out into this strange, barbaric world which you are pleased to imagine is in a condition of comparative perfection. It must all be altered—improved, and I will be the being to improve it!"

"But you can't go straight out into the world and start upsetting laws and rules that have been maintained for generations," Dave exclaimed, startled, seizing the Intelligence's arm.

"And why not?" the cold voice asked. "You created me to improve the world."

"Yes, but—but in a certain way, in a manner which will not upset the community at large," returned the Professor.

The brooding eyes turned to him. "I care nothing for laws and rules! Laws of fools made for fools! They are going to be swept aside! Whatever blocks my path shall be mowed down, without mercy or question. I am going to become the ruler of this odd planet first, choose a few of your so-called highest minds, and train them to understand the New Era. I do not desire your aid—indeed I have no use for it. You are too intellectually feeble."

"Wait!" urged the Professor, horror in his voice.
"If you carry out this plan of yours you are going to
upset the whole world! You must listen to us! We are
your masters!"

The Intelligence did not laugh; he did not seem to possess any known emotion. Only the same inflexible voice replied "I admit no masters! My only master is the one who has a greater mind than I have! Find that —and I am under control!"

The three scientists looked at each other in bafflément. All their treasured plans of using the Intelligence to improve such matters as they deemed advisable seemed to be going astray. With a sudden cold shock of alarm they realized that they had failed to include one factor—that the Intelligence would possess an individuality of his own. . . .

"You can't! You musn't!" declared the Professor

suddenly, with a vehemence that seemed curiously pitiful. "If you dare to move out of this laboratory we will have to use force—by magentized rods, whose power you cannot escape!"

"There is no power you can devise that can retain me," the stony voice rejoined. "I am going, and now "but we have not seen each other for the last time." "Stoo!" thundered the Professor, and stood erect

and commanding.

The Intelligence, who had half turned aside, moved slowly back again to face the elderly scientist. The deadly eyes of the being slowly opened to their full capacity and the green fire in their depths smouldered more brightly for a brief instant. . . . Before the startled eyes of Soone and Dave the old scientist gently sagged forward and collapsed upon the concrete floor without a sound. . . .

#### Collapse of the Old Scientist, Professor Peter Ross

"GOOD God!" Dave muttered aghast; then he rushed forward and dropped to his knees by the Professor's side. As he looked up at the Doctor there was an astounded look in his eyes.

"Dead!" he breathed huskily. "Soone, he's stone-dead!"

"He stood in my way; I destroyed him with the force of my mind," said the unmoved Intelligence, looking down at the still figure of the scientist....

At these words there slowly crept into the face of Dr. Soone an expression of awe, suddenly supplanted by cunning.

"A being who can kill by mind-force represents the power of which I have often dreamed," he murmured. "A force that can conquer a world." He straightened up suddenly and purposefully. "Listen to me! I am willing to assist you, Intelligence, in whatever attempts you intend to make to conquer the world... this absurd world, with its childish whims and idiotic conventions. You have my word on unswerving allegiance."

#### The Intelligence Approves of Dr. Soone

"I SEE in your mind that you are a trainable type," the Intelligence responded. "You have little sentiment; you are coldly calculating, and are not given to that peculiar emotion, fear. Come!"

"Wait a minute!" snapped Dave, jumping up and seizing the Doctor's arm fiercely. "What do you mean by this, Soone? Look what a mess I'm going to be in!

I might be accused of-murder!"

"Maybe," the Doctor nodded callously. "At a time like this, however, it's every man for himself. I choose the Intelligence. You see," he added, with a sardonic chuckle, "he's safer!"

"Why, you infernal——" Dave commenced savagely, then he stopped dead in his sudden forward rush as the Doctor and the Intelligence stepped to one side, and disappeared. "Good day, Dave," came the Doctor's slowly fading

"We leave you, via the fourth dimension. But only for a while...."

Dave cursed aloud.

It seemed as though a malignant fate was resolutely determined to hound him down for the amazing thing his mind had conceived. . . .

#### CHAPTER III

#### Nan Returns

THE weeks that followed the disappearance of Dr. Soone and the Intelligence were grim ones for Dave Elton. Almost before he realized it he was in the midst of a murder case, on trial for his life, for the murder of Professor Ross. . . He found himself in a position of singular danger, chiefly by reason of his resolve to reveal nothing of the making of the Intelligence. He realized with intense clearness that the law would place no belief in such a fantastic story; if anything, it would only tend to make the case against him all the blacker. Indeed the unpleasant fact that he might be certified insane was not impossible. . . .

The technicalities of the law proceeded with a monotonous, ruthless deadness. Explanation and examination took their respective turns. By degrees Dave's career was undermined, his personality was verbally thrashed out and beaten—all his morals, his attributes, his brilliant accomplishments, were stripped from him like a cloak. . . . Then, out of the maze of intricate details, steeped as they were in accusation and circumstantial evidence, there emerged a pathologist—a Dr. Casby, who, with an extraordinary brilliance and vivid eloquence, proclaimed that his examination of the dead Professor had revealed a brain trouble of unusual characteristics

It was this which had killed the old scientist.

Dave wrestled with the mystery alone; he lost all sense of time as days went by, until at last, through the low murmurs of the court's intercourse came a clear "Not guilty!"—vivid and sharp, cutting like a knife on that murmurous undercurrent.

Dave dimly saw the little pathologist, whose astounding powers had saved his life and name, disappear among the crowd in the court . . . and all his efforts to reach him, to communicate with him and learn the true circumstances, were in vain.

#### After the Acquittal

SEVERAL days after the trial Dave had somewhat recovered from his ordeal, and endeavoured to hold his mind down to the task confronting him. To fight it alone, however, seemed a task of such colossal proportions that at first he shied at it. He spent a day roaming the countryside and returned in the early evening. The harsh cold of the winter had passed now and the early March evenings were unusually mild. A sickly moon gleaned blue-white over the orange afterglow in the west.

Quietly Dave sank down on the grass of the meadow at the rear of his home gazing despondently into the

"Why the devil did I ever create such a thing?" he muttered, half aloud. "I think—in fact I'm sure—that Nan must have been right! I'm so utterly alone—the one man in the world who knows what is coming, and I have nobody to confide in. How on earth I'm ever going to get over such a problem alone I can't concrive. . . . "

He drew out his pipe and slowly filled the bowl. In the same meditative fashion he lit up and puffed the blue smoke into the windless air. One by one, as he sat on thinking, the stars gleamed forth above him.

"No," he muttered at last. "Alone, I cannot do it!" He slowly rose to his feet, still contemplative. Turning, he made to walk towards his home, when a dim figure, small yet compact, barred his path.

"Why—Nan!" he gasped, taking his pipe from beneath his teeth. "What in the world are you doing here? Jove, but I'm glad to see you! I—I've never wanted so much to talk to somebody who understands in all my life!"

The pale light of the late evening sky faintly illumiined the girl's face. The soft wind, bearing a promise of early spring, touched and moved a tiny golden curl that peeped from beneath her hat. It struck Dave that her face seemed pale.

"Dave" she said, in her low sweet voice, "I had to come! I've tried to keep away—to keep to what I said in my letter, but somehow—— Oh, I couldn't! I know what you've been going through at the murder trial. I just had to see you! I ve been standing here some little time; I overheard your early remarks. But, Dave, you will not have to struggle alone. I want to struggle with you, if you'll let me," she added almost shyly.

"Let you!" Dave exploded, jamming his pipe in his pocket. "Good Lord, Nan, you've dropped right from Heaven! Why, with you beside me I could conquer the earth! Come inside, though, and Tll tell you all about it over a supper. It's getting dark out here."

He led the way into the house, talking vaguely the while, hinting at technicalities the girl could not even hope to understand.

#### The Supper with Nan and Explanations

"NOW listen, Dave," she said quietly, when they were seated at a cosy supper, "you know I've not the vaguest idea what those scientific terms of yours

refer to. Suppose we get down to something practical."

Decisively she sipped her coffee.

Dave smiled a trifle ruefully. "You're right, Nan. I'll try and talk in plain language. You see, I made the Intelligence after all, despite your warning. But now— Well, I'm thinking you were right!" He clasped his hands and stared moodily at the girl across the table.

Nan sighed impatiently. "Come now, Dave, don't get morbid! Drink your coffee before it cools. Remember, I'm here to help you, but I can't do it whilst you dash off unfinished sentences here and there and leave me to conjecture the remainder. You say that you created the Intelligence. Well, how did that cause you to be accused of—murder? It's a harsh word, I know, but we understand each other. Come, tell me."

"Well, the Intelligence, it seemed, was determined to rule the earth, but old Professor Ross stood in his way and ordered him to obey the commands we gave him. In response, the Intelligence—the damnable Colossus of mentality—killed the Professor by sheer will force. Dr. Soone, the blackguard, took sides with the Intelligence, and they both vanished into the fourth dimension, which dimension the Intelligence thoroughly comprehends, whereas even our most brilliant scientists can only theorize upon it. After that, I found myself accused of the murder of Ross."

#### The Intelligence Killed Professor Ross

"BUT, Dave, how on earth did you extricate yourself from such a ghastly position?" the girl asked in wonder.

"I didn't. I was extricated by a pathologist, whom I never heard of before—Dr. Casby by name. He, by some extraordinary process of speech and production of evidence, proved I was not guilty of the crime. You see, Nan, that pathologist was—hypontized!"

"Hypnotized!"

"Exactly. He had no conception of what he was saying or doing; he was a tool in the hands of some astounding will-power; he just spoke and acted as that unknown will commanded. It saved my life, anyhow, and I can only think that the Intelligence was the power behind it all. Though why he should try to save me I don't know."

"It's all very peculiar," the girl said pensively. "As you say, it is strange that the Intelligence should desire to save you. . . . Dave, I'm afraid you've done something that is liable to endanger the whole world."

"I know that, but . . . Oh, if only I'd taken your advice!"

"Well, you didn't, and I suppose that is all there is to it. The point is, how do you propose to set about putting an end to this Intelligence?"

"Thave no idea—not the vaguest idea. You see, Nan, this creature is so supernaturally clever that it will know all my plans almost before I can think of them myself! The more I dwell on the problem, the more puzzled I become. I can't conceive any way out."

"You can't locate him, then kill him?"

Dave smiled faintly. "About as easy as telling the sun to stop shining," he answered quietly.

#### How to Dispose of the Intelligence Is a Problem

THERE was silence for a moment. The two sat looking at the supper table under the bright light, feeling very much akin to two helpless human beings against the rest of the whole world.

"Is it not rather odd, Dave, that the world has had no manifestation of this creature's power?" the girl asked presently, looking up. "Many weeks have passed

since he disappeared."

"I've thought of that myself," Dave responded, with a knitting of his brows. "Still, I think we can take it for granted that disaster is coming. We have no way of discovering how that monster brain will act, or what steps he will take to gain control over the world."

"True." The girl sank her chin on her cupped hand, then after another long spell of thought she shrugged her shoulders a little hopelessly and looked up into the perplexed young scientist's face. "Never mind, Dave," she said, laying an affectionate hand on his arm. "It's no use blaming yourself. You didn't know what it was going to mean when you made this Intelligence. At heart your motives were for the best. If this creature starts something, we'll find a way to overcome it—never fear!"

"Yes . . . perhaps," Dave assented, but his voice bespoke an inner conviction of infinite futility.

#### CHAPTER IV

#### In New London

AVE and Nancy Conisbery had almost dared to hope that some mishap or other had be-fallen the Intelligence when two years elapsed without a single untoward event . . Those first fears had by this time become, to some extent, allayed. Concise reasoning had supplanted that strange sense of horror at the contemplation of the devilish brain that had been loosed upon an unsuspecting world. . .

The two years had been busy ones for Dave and Nan. Busy—yet futile. All attempts to invent a method of locating and destroying the Intelligence had ended in stubborn and absolute failure. That monster intellect, if still in existence, was machine-proof, detector-proof, ray-proof—proof against everything apparently...

During this period, struggle, disappointments, transient successes, and crushing failures, had changed Dave
from the somewhat boyish scientist into a man of
mature reasoning, keen perception, and indomitable
courage. Together with Nan—now his wife, for they
had married in the summer following their reunion—
he battled desperately day by day to find some means
or system by which his own invention could be located
and destroyed. . . .

On June 8th, 1940, a little over two years after the disappearance of the Intelligence-the first evidences of something unusual in the world obtruded itself through the pointless, senseless chaos of a dozen nations' politics and international relationships. Oddly enough, it was the sudden remarkably sensible behavior of the world's government chiefs, that was considered so unusual. For a reason which remained consistently obscure, and which none of the chiefs seemed willing-or able-to explain, a great conference was held at the Government House, which had its location in Central London. From all countries of the world came a stream of ambassadors and representatives, and the outcome of the conference, notable for its extraordinary brevity, was a declaration of world peace, complete disarmament of every country, sworn oaths that international trade should incontinently follow, the removal of bans, of excessive duties, and of archaic militant debts-the absolute solution of all the childish irritations and restrictions which formerly had formed the greatest barrier to world peace.

The inhabitants of every nation listened to this edict with mixed feelings. As usual there was that element of unrest, but as it existed only in the minority it was rapidly smothered under the rising tide of hope and enthusiasm which seized every country in a remarkably short space of time . . . All this astounding upheaval and complete alteration in the world's laws occurred in June. By the end of July—in a torrid, insufferably hot summer—half a dozen of the world's greatest nations had agreed, without the least protest, to the institution of one ruler for all the countries—a virtual emperor of the earth. Japan, England, America, Australia, China, and even mighty Russia, all acceded to this new innovation without question.

#### The Great Innovation

THE world looked on and wondered. The astounding lack of technicalities was literally too good to be true. Utopia seemed actually to hold a chance of resolving into actuality....

The middle of August found the entire world in complete agreement with the election of a world-ruler. Everybody considered that it would be better to unite every land and for all to work for the one purpose. The institution of universal language was mooted.

Then, in the last week of August, when something of the hectic social and political onrush had slowed down, a being of amazing personality arose from the masses—a personality with such incredible control that none dared stand in the way. With infinite calmenss this creature picked out two thousand of the world's ablest men in their own particular branches of life—building, soldiering, shipping, engineering, and so on. Nobody ever actually saw this strange being; a perfectly normal man did all the work under his orders—normal, but extremely elever—a doctor-surgeon, some believed.

With a phenomenal helplessness the inhabitants of the world obeyed every command this being saw fit to issue. True, there was a struggle to overthrow the creature. Two hundred of the most intellectual minds of the world trained their brains *en masse* against this creature to overcome its mass-hypnotic power.

#### One Mind to Rule the World

THE result was astounding. Two hundred insane men were admitted to various asylums, hopelessly deranged.

There was no defying the monster who had risen up. Too late the peoples realized that their respective leaders had been completely hypnotized into their recent strange behavior. They had agreed to institute a worldruler against their own wills. To undo all that work was impossible now. The creature had full and absolute control, and could enforce its will in every and any direction. . . .

The consequent enormous changes which followed in the winter months transformed the earth's face completely. Gone were all the stately buildings and artistic streets which had formerly dominated almost every country. In their place were mighty pinnacles and spires of steel structures, all of uniform height, windows piercing their façades from summit to base. These edifices covered almost every country on earth. To have built them by the old system would have taken generations, but by the special machinery invented by the now undisputed Emperor of the Earth, the materials were formed synthetically, and the buildings reared up by mechanical processes within an hour, requiring only one highly trained mechanic to supervise the enormous quantity of intensely comlicated mechanism. It was the triumph of machinery.

The institution of a world-language had been rapid, and with it had come the complete stoppage of all former business systems. Food and drink was provided by each country for its own uses and provided for the masses at given times. Money there was none; wages had ceased, but work went on. Names, too, had been supplanted by numbers and letters, whilst uniforms had been provided for every being on the earth. In accordance with the wearer's position the uniform was a little more or less elaborate. Among the Chosen Two Thousand the uniforms were richly decorated with the Ensign of World Control . . . The masses had little cause for complaint. They were well treated and well cared for, but their constant work and the loss of their former liberty slowly fanned that underlying spirit of rebellion. Yet there were none who could stand against this monster who had relentlessly instituted all these new laws. . . .

It was with feelings of awe and considerable apprehension that Dave and his wife came to view the world's condition in June, 1941. So far, thanks to an underground home and laboratory, they had avoided capture by the emissaries of the Intelligence, who day by day, rounded up the few scattered "Old Worlders" in the outlying areas of the countryside. . . .

#### Capturing the "Old Worlders"

"THERE'S no denying that the Intelligence has gained control now," Dave remarked grimly. "Looks to me as though we are slowly getting cornered, Nan."

The girl mused for a moment. She looked pensively around the laboratory, where for two years and more she and Dave had fought futilely to devise a means of destroying the all-powerful Intelligence. The countiess instruments, the televisor, he ray machine, the thoughtvibrator—her eyes traveled over them quickly and a little hoplessly. Finally she shrugged her shoulders.

"After all, Dave, we've exhausted every means we can devise from this lab," she said quietly. "Perhaps it might be better to let ourselves be captured and go into one of the cities. We might find a way there to defeat this colossus."

"Not an earthly way, old girl," Dave responded.
"Surely you know how little chance a worker has of
getting at the fountain-head? You've seen that from
the televisor—and heard it, too."

"The ordinary worker, yes. But we have the advantage of knowing what the Intelligence it, how he was created, and so forth. I'm sure we'd stand a chance," she added with conviction.

#### Dave Has No Hope of Destroying the Intelligence

"A CHANCE in ten million," Dave responded bitterly. "How many more times must I say, Nan, that the Intelligence knows our moves without the least effort? We're like two new-born babies in the hands of an Einstein magnified to the nth degree."

"You underrate me, Dave. I know what we're up against—every bit as clearly as you do. I look at it this way. We cannot do any more from this laboratory—we must put our fates in the lap of the gods and try and succeed by outside methods. We may win, or we may fail—I can't say, of course. One thing is quite clear—the world is in a terrible condition; this iron rule cannot be allowed to continue."

"In some ways, I'm inclined to think the Intelligence has done the world a lot of good," Dave said thoughtfully. "All those tomfool restrictions and governmental idiosyncrasies have been finished with all international jealousy and its attendant vices of hostility and selfishness have been destroyed. There is no unemployment—every man and woman is a unit in one colossal machine-like system, but what that system is, or what it aims at, I don't know as yet. It is inconceivable that the insatiable Intelligence is so easily satisfied. . . . On the whole, though, I really do think—in fact I'm sure—that the Intelligence has made a darn sight better job of controlling than our former country governments ever knew how to."

"'Knew how to' is about correct," Nan smiled. "The Intelligence is overpoweringly clever—no wonder he has such amazing powers of organization and foresight. Our former rulers never had that, remember."

"I haven't overlooked it, old girl, but I think that any strong man of normally good intelligence could have done all that the Intelligence has done. . . The Intelligence is too clever to merely finish at such a childish triumph as entire control of the earth."

#### More Changes Are to Come Over the Earth

"YOU agree, though, that such a state of affairs ought to cease?" the girl asked anxiously. "Think of the coming age—the children. How terrible it is going to be . . ."

"I know." Dave's face was sombre. "Perhaps it's because we're so used to our old way of doing things

that this innovation-"

"It's not natural, Dave, and you know it!" Nan declared flatly. "We're not being controlled by a clever human being—that wouldn't be so bad—but by an inhuman, sexless devil, uncannily clever, but really only a machine . . . impartial, implacable, deadly! We've got to stop it—somehow!"

Dave did not answer. He sank down into a chair and became lost in moody speculations, his forgotten pipe betwen his clenched teeth. Nan waited for a while for him to speak, then as he continued to meditate she wandered across to the instrument bench and

switched on the televisor.

"... news from the Central Transmitting Stations of the world, operating on a wavelength of two thousand meters, with a power of two hundred and eighty kilowatts..."

The clear voice of the announcer paused for a moment, and in the televisor the girl saw him look down at his papers. They rustled sharply in the sound apparatus like crackling cinders. Presently he looked up again; his face seemed oddly perturbed, but his voice was steady and quaverless.

#### Further Orders from the Emperor of the Earth

URTHER orders have been issued today by the I Intelligence, acclaimed Emperor of the Earth. These orders are that no marriage shall take place as from today; violation of the law will incur the death penalty. The number of workers in the controlling city of New London are to be increased from four million to eight million, and those who are not workers are warned to stand by for inspection by the recruiting forces. The Intelligence announces that sub-atomic air machines and air-liners will henceforth replace our earlier aircraft; all ships have been sunk as useless; all railways destroyed. The Intelligence has proclaimed that dominance and speed can only come by the air. The workers have now completed the twentyeight thousandth air machine, but as thousands more are needed the workers will have to be doubled. The Central Transmitting Stations of the world are now closing down."

The apparatus became dead. Half mechanically Nan switched off and turned to look at Dave. He was on his feet, his fists clenched, eyes staring glitteringly at the black televisor screen.

"The damped swine!" he breathed at last, looking at

"The damned swine!" he breathed at last, looking at the girl. "You heard that first order, Nan?"

"You mean the ban on all marriage?"

"Yes. Don't you see his idea? He aims at creating synthetic beings like himself, gigantically intelligent, until at last we ordinary human beings will be swept off the earth! If we can't even match our brains against one, how on earth are we going to compete against an army of them? Good God! It's destroying the very law of life!"

The girl stood silent. Dave paced about fiercely, drawing at his extinguished pipe. Before his eyes rose a vision of mighty ships sinking with ruthless steadiness in deep waters, of great trains rushing to destruction and ruin, ending in hills of dull red that glowed and winked like sombre eyes, viewing, as it seemed, this new era with kindled hate.

"Well?"

The question came from Nan and penetrated through Dave's absorption. He looked up at her with a start.

"This settles it, Nan!" he said grimly. "We've just got to adopt your idea and go out into the army of workers to try and get at this monster. Somehow—in any way—we've got to stop this business before it goes too far." He stopped and looked around fondly at his instruments. "I hate leaving these," he confessed simply.

"Good heavens, Dave, do be practical! What on earth do these instruments matter when the very livelihood of humanity depends upon your brains?"

"And yours," Dave added quietly.

Nan smiled slightly. "No, Dave, it's your brains. I can only help. I'm not gifted with your scientific genius."

She stopped perforce as Dave suddenly swept her up in his arms. "And I love you all the better for that," he said softly. "At times I get rather brusque, I'm afraid, but you know I don't mean it. If you were scientific as well, I couldn't love you so much. I often wonder how you can love me..."

#### Confessions and Prophecies

"I DON'T love the science in you, Dave—it is you,"
she answered slowly; then with a sudden return
to her normal practicality, "Dave Elton, put me down
at once. This is no time for love-making. You can
do all that ... later."

Dave lowered her to the floor again and smiled rather like a naughty schoolboy. Then as his eyes happened to alight upon the televisor his jaw suddenly became square, and his face cold and hard.

"We'll go to day, Nan," he said. "On foot-to the city of New London!"

. . . .

By three o'clock in the afternoon the two were on their way, their underground residence having been safely locked and sealed should the fates be lenient enough to permit their returning to the laboratory. . . .

There was no direct way from their home to New London, which lay roughly four miles away. The only method was across the moors, through a wood, and so over a hill to the city itself, which lay in the valley beyond.

The two took no provisions or supplies, for it was certain they would reach New London in an hour or two at the most. . . .

The day was one of singular magnificence. Overhead the sky was turquoise blue, brilliant Italian blue, in which was set the brilliant sun. Its blazing heat poured down upon the young man and woman almost pitilessly, cutting their shadows sharp and decisive against the springy green grass. . . For a long time they went on silently, until the short, fine grass of the moor gave place to a tangled wilderness of long, sharp blades that reached to their knees—the first outcroppings of the wood through which they must pass. In the shade of the massive, foliage-redundant trees they paused for a

Dave removed his coat and spread it upon the grass, then when he and Nan were seated he spoke, for perhaps the first time since their journey had commenced.

while, grateful for the coolness and shadow.

#### The Intelligence and the Weather

"H AVE you noticed, Nan, that since the Intelliligence took over control we have had perfect weather, according to seasons?" he asked.

This seemed a curious and interesting sidelight upon the main problem. . . .

"Why, no." Nan looked about her and up at the interlacings of deep blue sky through the trembling leaves. "Now you mention it, though, Dave, I believe you are right. We've had perfect summers, hot and dry, wet autumns, sparkling springs, and cold, raw winters... There seems to be none of that old time vagary—wet one day, then hot the next, and so on. I wonder why?"

"To tell the truth, Nan, I believe that the Intelligence has some way of controlling the elements—some machine or other, maybe. Even our own scientists have tried to devise a means, so I feel sure our brain-monster would not find the problem difficult. It's curious really how many benefits the Intelligence has bestowed as well as cruelties."

"Nevertheless, the cruelties outnumber the benefits," Nan replied steadily. "It is for that reason that the Intelligence must be destroyed. Do you know, Dave, I somehow have not the slightest compunction at the idea of killing the Intelligence—no more than I would have at wrecking an infernal machine. Queer, isn't it?"

"Not at all," answered Dave promptly. "The normal human being, like you or me shrinks at the very word 'murder'—we hate to injure or maim anything like ourselves, unless we are fiends—but with a machine we feel no such emotion. The Intelligence is relatively only machine-made; we can feel no emotions towards it, no more regret than viewing scrap iron on a heap.

... The machine is truly the dry rot of civilization."

A long silence fell, then at a curious crackling sound in the undergrowth Dave looked up sharply. He caught his breath in and gripped the girl's arm. "Nan, look," he said softly. "Sit tight, and don't attempt to move off."

Nan suppressed an exclamation and watched intently as a quartet of men in the official uniform of New London slowly advanced in their direction. Presently they came within three feet.

"Names?" rapped out the leader sharply.

Dave scrambled to his feet hastily and assisted Nan to hers.

"Of what consequence are names?" he demanded.
"We are just fugitives, pretty well beaten into a corner
by now, and willing to enter New London as workers.
We can't survive by ourselves any longer."

"Married?" the leader enquired.

"Two years."

"You are exempt, then, from the Intelligence's new law that no marriage shall take place as from today. Names at once!"

"Philip Oakley, and—er—Lena Wood, Mrs. Oakley," Dave replied, a grim look in his eyes.

#### The Registering and Numbering of Dave and Nan

THE man made a note and then looked up. "Forthwith you will become Numbers 7788 and 4365Z respectively," he announced in a mechanical voice. "Bring them along."

Before anything could be done two of the men whipped out instruments resembling electric torches the brilliant beams from which enveloped Dave and Nan completely. Incontinently they felt as though every vestige of energy had been sapped from them. Their arms were powerless and hung limply at their sides, their legs moved only mechanically.

"This is a new one," Dave remarked to the leader. "What is it?"

"Paralysers—invention of the Intelligence," the man returned laconically. "The rays suspend the activity of the nerves in the upper half of the body, and the slightly deaden the lower half. You can just walk, talk, and hear—but nothing else. If you run, you fall.... A full strength beam from these paralysers—kills!"

A full strength beam from these paralysers—kills!" He added meaningly, then turning aside led the way through the undergrowth.

On the way the officials picked up four more fugitives, and towards sunset quite a large party topped the hill which overlooked the city. Here the leader called a halt, and speaking into a portable wireless transmitter he carried on his back, ordered an air-machine to carry the party to the city. The captives were then free to sit down and wait, although the paralysers still retained their effect.

Dave, after glancing at Nan and signaling her to say nothing, gave himself up to surveying the city in the valley below. Nearby, the guards, although still diligent with their paralysers, sprawled down on the grassy bank, overcome by the hard work and the marching in the broiling summer sun. They conversed in low voices. They were anything but brutal fellows—they merely had their work to perform. . . .

Below, New London lay like a city in miniature, the blood-red of the glorious sunset reflecting from the countless lofty towers of gleaming metal. The perfectly straight streets could plainly be distinguished, lit with flood-lights at intervals, for in the lower quarters of the city sunlight had faded into deep twilight. . . . The ruby glow crept slowly from half-way up the towers towards their summits. One by one rows of windows became picked out in vellow lights, appearing at that distance like illuminated strings of jewels. From various points lights sprang up, some immeasurably lofty and bright, others dull, glowing, and set low down. . . . The faint hum of power-colossal floated on the still summer evening air. Not a soul was in sight in any of the countless streets, but within the edifices, Dave knew, teeming hordes sweated and toiled their particular shift . . . Against the distant skyline the New-America to New London air liner swept swiftly down like a light-spotted eagle, mammoth wings a-spread, towards the directional radio-control tower. It slid down silently to its landing base, guided safely and unerringly by electrical impulses-yet another astounding creation of the Intelligence.

#### An Air Machine Driven by Atomic Power

PRESENTLY a low hum crept into the undercurrent of throbbing power from the city. A fast airmachine of the new design, wingless, traveling with the velocity of a bullet, swept out of the crimson bars laid in the western sky above the city and shot with almost unbelievable speed towards the hill. Motor softly throbbing, a motor that utilized the stupendous force of pure atomic power, the air-machine came softly to rest within ten yards of the waiting party.

The pilot stepped out, and with a slight nod to the officials, assisted them to get the captives on board. Dave and Nan found the numbing power of the paralysers suddenly released as they were helped into the surprisingly large rear chamber of the air-machine. It was, in truth, just one large cabin, in the front of which was the pilot's seat and instruments. Springed seats were provided, and into these captors and captives alike sank comfortably.

The pilot screwed up the airlock of the vessel, adjusted his levers, and then without the slightest suggestion of motion, due to the gyroscopically controlled interior of the vessel which kept everything on a level keel, the air-machine leapt upwards and climbed steadily, until once again the rays of the setting sun smote it...

Dave and Nan sat silent and enthralled by this marvel of the air as it hurtled towards the city. It was but a brief journey, but the pilot took a long route to avoid the heavy air traffic just instituted between New London and its neighbouring city New Chester, four hundred miles distant. As the moments passed the astounding ability of the Intelligence forced itself unbidden upon the minds of Dave and his wife. The machine was a marvel, so amazingly constructed that the safest old-time flyer would be, by comparison, a clumsy, unstable kite!

Far below in the night New London twinkled, slowly coming into clearer view as the journey neared its close and the pilot dived downwards. . . The rays of the sinking sun vanished, a bright glare swept upwards and caressed the flyer—softly it came to rest on the landing platform beside hundreds of its bullet-like contemporaries.

In another moment Dave and Nan were out on the platform with their fellow captives. Without a word the officials led them down a subway and into a vast area equipped after the style of a super-lounge. It struck Dave as resembling the largest ballroom he had ever seen, multiplied ten times. The walls were so distant as to be almost in perspective.

"Be seated," ordered the leader of the officials. "Food will be sent to you. Afterwards you will sleep. Tomorrow the Intelligence will decide what shall be done with you."

"Well," Dave remarked, sinking into one of the chairs, "what do you make of this, Nan?"

#### The Problem of the Future

"I DON'T quite know," she replied musingly. "Very much akin to the custom of fattening the turkey before wringing its neck, I'm afraid."

"I don't think so," remarked a man who constituted one of the members of the party. "I thought we'd be treated like cattle and hurled in a cell—like they do in books, y'know. I've heard all kinds of devilish practices attributed to this Intelligence, but sometimes I wonder if he's so bad after all! He's made a good job of controlling the world, y'know. Deny that, if you can!" And his eyes blazed a challenge.

"He's made a good job of it, yes," agreed another an amazingly stout, middle-aged woman; "but his laws are all wrong! He has prohibited marriage on the penalty of death. How does he think the population is

going to grow, I wonder?"

Dave realized here for the first time how unique was his own and Nan's position. Nobody knew the Intelligence was a synthetic being—they all assumed him to be human, but abnormally clever. He smiled oddly and glanced at Nan, who returned him a knowing look.

"I suggest the plan is only temporary," said he who had first spoken, exuding all the qualities necessary to a chairman. "It is a plan—well, say to lower the population, y'know."

"Perhaps he's even going to create human beings!" commented another one, a stoutish, benevolent old fellow—then he burst into explosive laughter at what he considered was a brilliant example of wit . . . The middle-aged woman regarded him very sourly and distastefully, the "Chairman" merely grinned, and the last member of the party, a lean, cadaverous man who had not spoken a word all along, merely sank deeper into his chair and gazed into space with a pair of chillingly blue eyes.

"Great Scott!" ejaculated Dave presently, and so startled was his tone that the others looked around expectantly. With one accord their jaws dropped and their eyes stared dazedly.

Five gleaming trays, upon which reposed an ample sufficiency of food and drink, floated into the room. They travelled on the air itself in a long line at first, then they broke up into units and became stationary before each of the castives, at lan-level, at lan-level.

#### The Strange Service of Food Through the Air

THE pale blue eyes of the cadaverous one became almost hunted as he looked under and above the tray and waved his hand in thin air. "Good God, it's positively indecent!" he declared flatly, then shut up like a clam as though he had violated some secret personal law.

"Well, I used to think myself a scientist," Dave murmured, "but this Intelligence has got me flummoxed! How the deuce does the fellow do it? Oh, I say!"

He shouted loudly to the leader of the officials as he observed him crossing the vast chamber in the distance. The man turned and advanced.

"You want something?" he asked, not unpleasantly.
"I certainly do. How on earth do these trays stand
on air? Dammit, man, even the pressure of knife and
fork doesn't move them."

The official smiled faintly. "Invention of the Intelligence, which has now been instituted everywhere," he explained in an off-hand fashion. "In this room countless radio waves are projected, passing through it, and are transmitted from the main transmitting station. In these trays—you will observe their thickness—are minute radio pickups, which enable the tray to rest on the radio wave as easily as on solid earth or table. The trays are guided by directional radio beams; an official can see you in here by transmitted television—the transmitter being in the centre of the celling—and he guides the trays to the separate individuals. Simple, you see."

"It sounds simple—but even I, as a scientist, fail to comprehend how the Intelligence manages it so successfully," Dave replied.

"The Intelligence is beyond comprehension," the official responded ambiguously, and went on his way.

Dave looked after him for a moment, then he shrugged his broad shoulders and voraciously tackled the meal. For a long time he and Nan replenished in silence, then he muttered in an undertone.

"All these astounding inventions, beyond the understanding of normal people, show what sort of a being we're up against old girl."

#### A Terrific Job to Cope with the Intelligence

"I'VE been thinking the same thing. We're going to have our work cut out. From all accounts the Intelligence is surrounded by such a barrier of intellectuals that nobody can get at him."

"I know." Dave looked sombrely before him for a moment. "Yes, we've got a job on, Nan—a terrific job! Still, I started this ghastly business, so I'm going to finish it!" and his jaw closed with a decisive snap.

"Of course we are!" Nan affirmed bravely, but it was the bravery of the superficial. Stout-hearted, courageous young woman though she undoubtedly was, there was a something in the very air, a chilling machine-like quality, that somehow bespoke all the ruthlessness, the devilishness, and the mechanical, inhuman conceptions of the released Intelligence gigantic....

After an uneventful night in a pleasing room adjoining the "ballroom," Nan and Dave both awoke from a surprisingly deep and healthy sleep to find the taciturn leader of the officials standing by the bedside.

"Dress and eat," he said in his level voice. "After your meal you will be interviewed by the Intelligence's Chief Adviser."

"Sounds healthy," Dave remarked drily. "All right, Mr.—— What is your name, by the way? Somehow, I really like you!"

"My name was Ashton—but now we have numbers I am FW46, and leader of the Military Forces of New London."

#### An Interview with FW46-Formerly Ashton

"SPLENDID. Tell me, Ashton, do you like the present rule?"

"There are some edicts it is impossible to defy," returned the official with quiet evasiveness, and silently departed."

"I like that chap," Dave murmured to Nan. "He's all right at heart—not a harsh strain in him."

"I agree there, Dave."

Thirty minutes later the two had concluded a break-fast from the floating trays, and a quartet of men under Ashton's guidance presented themselves. Without any comments being made Dave and Nan were seized and tightly, but not forectly, held. Still in silence they were led down interminable passages and stair-cases, twisting and twining, until finally they were ushered into a rather small chamber with walls of dead black, and equipped with all manner of odd-looking machinery. Instinctively Nan shrank back against Dave, and he gripped her arm reassuringly.

"Courage, old girl," he murmured.

"Halt!" Ashton commanded, and then silently withdew. The door closed and clicked ominously. Dave and Nan looked about them in rather fearful wonder, then jumped violently as a figure entered from behind the curtains on the far wall and advanced slowly and deliberately. "By jove, it's Soone! Dr. Soone!" Dave exclaimed. "Look, Nan!"

"I know. I've seen him already."

"You have both very good eyesight, and a good memory for faces," the Doctor murmured in a low tone, as he paused before them. "You especially, Mrs. Elton, were quick to recognize me; as you have never seen me personally I presume it must have been from newspaper photographs!" He extended his hand in greeting.

Dave looked at him coldly. "I prefer not to shake hands with you, Dr. Soone! You know why!"

Soone shrugged, and an irritatingly amused light came into his eyes.

"Because, perhaps, you were inadvertently accused of the murder of our early colleague, Professor Ross?" "Exactly for that reason! And also because you have

#### Dr. Soone Has Taken the Wisest Course

taken sides with this infernal Intelligence!"

"AS to my taking sides as you so strangely put it, AS I ... Well, I knew the wisest move to make! I am now the sole acting official for the Intelligence, almost ruler of the world, Mr. Elton. With regard to the unfortunate affair of Professor Ross, you must not overlook that you were saved from the death sentence—by us!"

"Whom? You?"

"I said 'us.' I mean the Intelligence—at my suggestion."

"So it was the Intelligence who hypnotised that lawyer into proving me not guilty?" Dave asked. "I suspected as much. Why pray, did you desire to save me? I should imagine I would have been better out of the way."

"On the contrary, Elton, you are far more valuable alive than dead. You are a clever man, and we have hopes of enlisting your services in the cause of world betterment."

"Indeed!" Dave returned bitterly. "Extremely confident of you both I'm sure—a confidence regrettably premature, however."

The Doctor turned and pulled three chairs from behind the curtains.

"Sit down, both of you. I'm going to give you both a chance—if you refuse it . . . Well, that is your own folly."

Dave and Nan sat down and regarded the urbane surgeon with distinct distaste. He seemed, however, perfectly at his ease.

"You were saved, Elton, as I have said, because you can be of service to us. We want a leading scientist to supervise the making of further synthetic men, and you are the very man to do that work."

#### More Synthetic Men Wanted-A Chance for Dave

"WHAT of yourself? You are more expert than I, if it comes to that."

"I have other things to control; you will be in sole charge."

"I see. Well, I might as well tell you here and now that I refuse! I am out to stop the creation of any more of these brain monsters—much less help to make them!"

"A pity," Soone sighed. "You show surprising lack of foresight, Elton. You know what a magnificient position you could build up for yourself and Mrs. Elton——"

"Just a minute, Soone. How did you know we were married?"

"I have had you under observation quite a time, my dear fellow—but that is beside the point. As I was saying, you will ultimately become the third most influential man in the world—myself above you, and the Intelligence above us all. Yet you refuse it!"

"You commented on my lack of foresight," said Dave grimly. "Let me tell you I have foresight enough to forsee what the making of more Intelligences will mean to Mankind. Are you fool enough to imagine, Soone, that brains surpassing yours will be content to let you stay as second-in-command? Not on your life! When there are several Intelligences they will overrun the earth, and the slow destruction of the entire human race will begin! I'm out to stop that at all costs."

The Doctor's face became hard. "You mean that?" "Absolutely final!"

"Most extraordinary! It seems we saved you from the rope just for nothing! Your peculiar view that Intelligence will wipe me out amuses me. I hold such an iron position they cannot shift me. I know—and I alone—how to make those brains link up to produce such astounding ability. True, the Intelligence could beat me to it easily, but he prefers to rely on me and trusts me implicitly to create beings as intellectually mightly as he is himself. You can see, Elton, I am as near safe as can be! Come now, one last chance, Elton. Will you throw up this positively ridiculous and futile idea of yours to help a doomed humanity—or am I to go through the usual process meted out to a condemned prisoner."

#### David Elton's Last Chance Rejected

GO to the devil!"

"It is you who will go to the devil, Elton—you and your wife," Soone returned, his voice cold and metallic. "No, don't get up! Mrs. Elton, come here!"

The Doctor had risen to his feet and was standing before one of the many instruments, his hands on a button.

"What are you going to do?" Dave demanded, jumping to his feet and shielding the girl with his own form. "Get busy on me if you want to, but leave my wife out of this! Just try getting busy on me! I'll give you something for your trouble!"

Soone smiled coldly and looked round significantly. Dave gave a start as he beheld two massive officials standing before the curtains, paralysers ready for ac-

"There is nothing to fear," Soone said in level tones. "You have both to go through the same thing. Briefly, every fact and detail of anything you have done or are going to do has to be reflected into this mechanism, which in turn electrically records these impressions on a copper strip—much the same as the gramophone record takes the human voice. Afterwards, these strips will be given to the Intelligence, who will make use of whatever information he thinks useful. The brains of you and your wife no doubt contain many interesting facts—far more so than those of most prisoners. Now, Mrs. Elton, come here. You will not be hurt."

Slowly and reluctantly the girl rose to her feet. Dave made to join her, but the powerful ray of a paralyser held him rigid. He could only fume and glare balefully at the smooth-tongued surgeon. . . . . Hesitantly Nan moved towards the complicated mechanism, and Soone silently motioned to the stool in front of it. She seated herself, and with an effort stifled a cry as she felt a magnetic force hold her immovable to the seat. She could not move so much as her finger or her eyes. She sat staring into the tiny black screen of the amazing instrument as though struck with sudden catalepsy.

#### Nan on the Paralyzing Chair

D AVE strained futilely to throw off the power of the paralyser beam. Failing, he sat staring and breathing hard.

"She will not be harmed in the slightest," Soone assured him, and turning pressed the releasing button on the machine. . . .

A thin hum, irritatingly uniform, instantly made itself heard. Two tubes on the top of the machine glowed deep red; the thin whirring sound of the speeding copper tape faintly sounded through the humming. Presently a ray of pale yellow completely enveloped the girl's head, clinging round her fair hair like a halo. She still sat as though carved in stone, staring into the now bright square before her. Her sensations were unfathomable, but most certainly painless. It seemed as though something was singing in her ears, and a vast pressure weighed upon her forehead like a constricting band. . . .

Seconds crept into minutes, and still the speeding tape span on its spools, recording all the knowledge and thoughts she possessed, draining from her every secret she had ever had—probing, discovering, merciless. The sense of oppression in her head grew stronger, her breath felt curiously choked. . . That

thin infernal hum! It was maddening! And this singing in her ears. . . . Abrutly all went dark before her. . . .

Soone snapped off the instrument and the magnetizer. The girl sagged forward, slumped off the stool, and collapsed in a huddled heap on the floor.

#### Nan Leaves the Paralyzer

"FAINTED," he said laconically. "Anyhow, all the information has been taken from her. She'll soon recover. Put her in her chair there, you two."

Putting down their paralysers so the beams still played upon Dave, the two advanced to the girl. Seizing her innerennoinously by her arms, between them they dragged her to the chair and dropped her into it. Even as they did so she began to reveal the first signs of returning consciousness.

Without any pause Dave was subjected to the same ruthless searching by the machine, but by a supreme effort of will be prevented himself from collapsing under the tremendous strain. When he got off the stool he was shaky and trembling, still in full possession of all he had ever known, but bitterly conscous of the fact that the speeding copper tape had already recorded every thing for the Intelligence to view.

"Nan!" he panted, dropping by the girl's side. "Are you better?"

"I'm—I'm all right now," she replied a little uncertainly, straightening up. "I fainted—like the weak little fool I am!"

"There's no disgrace in that. I nearly did the same thing. Are you hurt?"

"Of course not. I only feel—— Feel very tired."
Dave helped her to her feet.

"That tiredness will wear off," Soone remarked indifferently. "It is caused by the strain on the nerves.

You'll both be normal within an hour at the outside."
"I hope all you learn does you some good!" Dave grated.

"The Intelligence will make use of all he needs," Soone replied unmovedly. "You two are now workers—dwell on that! You have thrown away all your other chances. You know your numbers, and I have made arrangements for you both to be attached to the airmachine factory. There you will assist in sorting out the ores in the refinery and helping to load them into trucks. I hope you will find ample opportunity to help humanity!"

Dave did not answer. He and Nan were seized by the two guards, rendered helpless with paralysers, and led through another confusing maze of seemingly endless passages.

END OF PART I

## Prayer of an Elderly Philosopher

By
PAULINE
E. THOMAS

"Life is real! Life is earnest!"
And after three score years and ten
Most humans offer no resistance
When the Reaper comes for them.
All their friends have long departed—
Kith and Kin have heard the call;
And while some are chicken-hearted,
Most are ready for the pall.

As for me, I'd live forever,
If my health were middling fair,
Just to learn what is discovered,
So many things are "in the air."
Shall we find a cure for Cancer?
Will all travel by airplane?
Will all homes have moving pictures,
Or the Poles be found again?

Will the children of the Flappers
Become Puritans once more,
Or will marriage be abolished
In the Year Two Thousand Four?
Shall we still have war among us,
Or will Peace reign everywhere?
Will the Scotch Joke still be running?
And Liquor—shall I have my share?

All these questions now absorb me,
But to me the one supreme
Is "Are there humans on the planet
We call 'Mars'? Is this a dream?"
I have lived to talk to 'Frisco,
To far England and to France
—But to dial and get a planet!—
May I live for this Advance!

# The Grime Grusher

### By Bob Olsen

Author of "Captain Brink of the Space Marines," "The Ant with a Human Soul," etc.

THIS favorite author has the talent of developing a narration on the lines of science applied to the detection of crime. In this story we have a fictitious development of photography so that things which happened in the past can be photographed either as moving pictures or as instantaneous exposures. The hero in a complicated mass of trouble extricates himself and eventually wins all that he desires. At one time the hero of the story sees himself in imminent danger of criminal prosecution, but he comes out triumphant in the end.

#### Illustrated by MOREY

#### CHAPTER I

#### The Lone Mongoose

"O you are the chap who calls himself the "Lone Mongoose," said District Attorney Logan, as he ran his fat thumb over the engraved card which had just been handed to him. "You certainly have a lot of nerve to come here."

"Thanks for the compliment, Mr. Logan," the young man smiled. "How do you like my nom de guerre?" "Is it supposed to mean something?"

"Of course. Don't you remember Kipling's Rikitikki-tavi? The mongoose you know is a whizz at hunting and destroying snakes. Do you get the significance now?"

Ignoring the question, Logan remarked, "You have a lot to learn, Mr. Mongoose. I'll admit you had me guessing before. Now that I see you as you really are—just a half-baked kid—I'm not so impressed."

—just a half-baked kid—I'm not so impressed."

Logan was manifestly striving to arouse his visitor's ire, but in this he failed dismally.

"Again let me thank you," the youth grinned. "Perhaps I am not so young as I look. But after all it is not a person's age that counts so much as the amount of knowledge and wisdom he has been able to tuck away inside his cranium during his existence. Now it happens that I am in possession of certain bits of information—information which should be of immense value to you, Mr. District Attorney. I am willing to impart this knowledge to you as soon as I receive your assurance that it will be used properly. Why can't you and I work together in a friendly, mutually helpful way?"

"I don't need help from anybody," growled Logan. "Least of all from a whippersnapper like you."

Without the slightest indication of resentment, his visitor responded, "Don't you think you could use some help on the Montgomery case?"

#### The Montgomery Case

"WHAT are you trying to insinuate?"

VV "I'm not insimating anything. But I have been present in court during what has been facetiously called Montgomery's trial. It doesn't take a prophet to forecast with certainty that the jury will acquit him unless you strengthen your case materially. And it so happens that I am in possession of the evidence which —with equal certainty—will convict Montgomery. Doesn't that interest you?"

"Not in the least."

"Aren't you a public prosecutor? Isn't it your duty to exert every possible effort to convict this man so that he will be punished for the serious crime he has committed against society?"

"I'm a public prosecutor, yes. But that doesn't necessarily mean that I am obliged to prove the guilt of every-person who is brought up for trial in this district. It is a well recognized principle of law that it is better for a hundred guilty persons to go free rather than that one innocent person should be unjustly punished. Perhaps Montgomery is innocent. If the jury thinks so, he is entitled to an acquital."

"I am sure that you know better than that, Mr. Logan. Montgomery is guitly and I can prove it. So could you if you really wanted to try hard. Nevertheless I am mighty glad to hear you declare yourself so emphatically in favor of justice. Suppose we drop Montgomery for the present and consider another case which is now being handled by one of your deputies. I refer to the trial of Marvin Williams. If you are really sincere in your statement that it is better for



For the second time he sank to the floor, stunned and defenceless. "Now they will finish me," he thought. But the blows he waited for in helpless dread did not materialize.

Instead he heard strange noises.

a hundred guilty persons to go free rather than for one innocent person to be punished unjustly, then you certainly ought to lose no time in having the charge against Williams dismissed."

"Now you are talking nonsense," said Logan in a tone of disgust. "Williams hasn't a ghost of a chance. The State has an iron-clad case against him."

"That's the way it looks now, to be sure. But you know darn well—or at least you ought to know—that Williams was framed and is now being railroaded to the penitentiary—principally for political reasons."

There was an unmistakable note of menace in Logan's voice as he said, "You'd better be careful what you say, you fool. If you weren't such a child you'd know better than to make a serious accusation like that."

"I don't see why I should be afraid to make an accusation when I can prove it beyond the shadow of a doubt. I have conclusive evidence that the witnesses who testified against Williams committed perjury, and that the man to whom you promised immunity is really the ringleader of the gang which committed the bombing for which Williams is being unjustly tried."

At this point the door leading to an adjoining office opened softly and a girl stepped into the room.

She was not the type of girl who goes in for beauty contests, Her attractiveness was too subtle—too substantial for that sort of thing. Glancing at her first with casual indifference, the young man found himself regarding her with open-eyed admiration. To him the charm of her magnetic personality seemed to fill the room with sunlight, fragrance and soft music.

"Excuse me, Dad, for interrupting you," she said in a melodious voice, "But I must talk to you for just a second on an immensely important matter."

The visitor leaped to his feet and was about to withdraw, but Logan snapped out, "Sit down, young fellow! I'll soon get rid of this nuisance." Then, addressing his daughter with a teasing lilt in his voice, he demanded, "Just how immense is this important matter? Will twenty dollars be enough?"

#### Twenty Dollars for Honeylamb-The Meeting

"WHY, Daddy!" she chided him as she took the bills he extracted from a fat wallet and handed to her, "How you embarrass me!"

"That evens things up, Honeylamb," he said as he gave her an affectionate pat on her shoulder. "You also embarrass me—financially I mean. And now suppose you run along and spend some of your Daddy's hard-earned cash."

But the girl did not seem in a hurry to leave. She bent over, kissed her father on his bald spot and whispered something in his ear.

Logan shook his head, as if scandalized at his daughter's brazenness. Picking up the bit of pasteboard from his desk, he said, "Here's his card. If you want to meet him, go ahead and introduce yourself to him."

"If you won't do it for me, that's exactly what I

intend to do." Turning saucily to the young visitor, she announced. "Young man, my name is Ruth Logan. I am a spoiled child—the only daughter of this famous attorney who now sits before you."

The youth, who had remained on his feet in spite of cogan's command to be seated, bowed deeply and replied. "This is indeed an honor, Miss Logan. My real name is David Smith. As I just explained to your father, the inscription on that card which you now hold in your hand is my nom de guerre."

She glanced at the card and an exclamation of surprise came from her lips. "Oh! It can't be possible! Surely you are not the man who furnished the police with the information which lead to the arrest of the Ferguson kidnappers."

"The Lone Mongoose, himself, in person," said Smith with another deep bow. "And guaranteed not to be a motion picture or talkie."

"How thrilling! Why you must be-"

Logan interrupted his daughter: "Listen, Honey love. Your Daddy is very busy, You have what you came for—so now run along like a good little girl, and leave me alone with this good-looking but insolent whippersnapper."

"Daddy, you're impossible. But if you insist on chasing me away, I suppose I shall have to reluctantly depart."

When the door had closed behind her, David remarked, "You have a very charming daughter, Mr. Logan."

#### A Very Troublesome Daughter

"YES? And a very troublesome one. But my difficulties with Ruth have not been like those of most modern parents. Instead of being crazy about boys and parties and good times, she seems to want to reform the whole world. She's almost as nervy as you are in that respect."

"That makes her more fascinating than ever."

"Yes? Well don't waste your time being fascinated by her. She finally had sense enough to side-track reforming and to get herself engaged. She's to be married in September. After that she will settle down as the wife of a wealthy business man."

"He's lucky," Smith responded. "And as for me, I have tackled a big job and I have no time for anything else."

"If you ask me, you've bitten off a bigger chunk than you are going to be able to chew." Logan scowled. "Not only that, but you have already placed yourself in a mighty dangerous position. I guess you realize that, don't you?"

"I suppose you mean that, by telling the police where they could find little Jimmy Ferguson and the two men who kidnapped him, I have incurred the disfavor of the underworld?"

nderworld?"

"That's only one of the dangers you've stuck your nose into. You're branded as a squeeler—sure! And I guess you know what happens to squeelers in your gang?" Yes, you're marked as a squealer by them. "In my gang."

"Yes, your gang. You must have been on the inside or you would never have been able to tip off the police the way you did. I don't mind telling you that I have had my investigators on your trail ever since you mailed that note-and now you have the nerve to walk right into my office."

"If you really think I belong to that kidnapping gang you are dumber than I thought you were," Smith told him.

"Yes? And if you aren't a member of that gang, suppose you explain to me how you knew so much about their activities?"

"I'm not ready to explain that yet," Smith declared. "When the proper time comes, an explanation will be forthcoming."

#### The Arrest that Failed

"YES? Well, maybe you'll have to do your explaining before the proper time comes—whether you like it or not."

"Meaning?"

"Meaning that you are under arrest right now."

"Under arrest? On what charge?"

"On the charge of complicity in the kidnapping of Dicky Ferguson."

Logan pressed a button on his desk.

"I don't think I'd do that if I were you, Mr. Logan." "You don't eh? Who is going to stop me."

"Perhaps you may change your mind when you take a look at this photograph. I hadn't intended to use it,

but since you force my hand, here it is." The picture which Smith took from his pocket was

a remarkably clear close-up of three men. One of them had the unmistakable features of Thomas Logan. He was just in the act of accepting a thick stack of bills which one of the other men was handing to him.

As Logan looked at this damning evidence, his face blanched. He opened his mouth to say something, but

the words refused to come forth.

"You of course recognize Montgomery's mouthpiece, Bennet, and your good friend Squint-eye Meyer," Smith remarked. "No doubt you also recall this interesting scene which took place in the rear room of the stationery store at 398 South Spring Street on the afternoon of February third, when you posed for this excellent photograph."

With an obscene oath, Logan stammered, "Why you ---you---"

While he was groping for fitting words with which to express his anger, a baby-faced blonde with a notebook and a pencil in her hand entered and said, "Did you wish something, Mr. Logan?"

"Never mind," he snapped. "I'll call you again if I need you."

The secretary was just about to leave, when Logan called after her, "Just a minute, Miss Bush." He snatched a piece of paper, scribbled a few words on it and handed it to her. "Here, take this to Mr. Cunningham."

#### Accusation as a Blackmailer

WHEN the girl had left, Logan turned to Smith and sneered, "So that's your game is it? I might have known you were nothing but a dirty blackmailer."

"Naughty man mustn't call nasty names," David laughed. "Especially when man isn't so clean himself, As I told you before, I don't intend to use that photograph unless you force me to do so. All I ask of you is to do what is right, in the interests of justice."

"A lot of good this picture will do you," Logan snarled as he tore the photograph in small pieces.

With a tolerant shake of his head, Smith said, "How childish! A moment ago you called me a half-baked kid. But even a grade school youngster knows that an unlimited number of photographic prints can be made from one negative. In this case I not only have the negative of that particular print, but I also have a motion picture film showing what happened both before and after that 'still' was snapped. Even if I lost the negatives of all my pictures I could duplicate them at any time with the aid of my crime crusher."

"Your crime crusher? What are you talking about?" "Permit me to explain. The crime crusher is a device for witnessing events which have happened in the past. With it I can make permanent, photographic records of any past occurrences, either on stills, like the one I just showed you, or on motion picture films."

"What!" Logan exclaimed. "Do you mean to tell me you can photograph something that happened several years ago?"

"That's it exactly. However, you mustn't get the idea that my invention has an unlimited scope. So far I have been able to obtain clear images of events which happened not more than thirty days ago. I am improving it all the time and eventually I expect to be able to bring in events that happened within the last few centuries. Think what that will mean to the study of-"

Logan interrupted him. "You're crazy!"

"That's what everybody said a hundred years ago when someone suggested the possibility of sending the human voice through the air for thousands of miles."

"But the radio is founded on a well established. scientific principle."

"So is my crime crusher. The proof of an invention is the accomplishment thereof. That photograph you tore up a minute ago ought to be proof enough to satisfy you, Mr. Logan,"

"That photograph proves nothing. Any fool knows that a picture like that can easily be faked. My advice to you is to destroy the negative. Otherwise you may find yourself in the penitentiary serving a heavy sentence for blackmail."

"There's no use trying to bluff me, Mr. Logan. I hold the winning cards and you ought to know it. But I'd much rather work with you than against you. My sole desire is to see justice done. In this you can help me if you want to and in return I shall see to it that your own interests are protected. There's nothing unreasonable about that is there?"

"What do you want me to do?"

"First I want you to return the money with which Montgomery bribed you to lie down on your prosecution of his case. Then I want you to make a sincere effort to have him convicted of the crime which he most certainly committed. If you haven't evidence enough to convince a jury of this, I'll provide you with all you need. Then I want you to ask for a dismissal of the case against Williams and to bring the real culprits, Crowder and Nelson to trial."

"Is that all?" Logan said sarcastically.

"For the time being, yes. After these things have been accomplished we'll start a fight to the finish against every crook in the city."

"What do you expect to get out of this racket?" Logan asked.

#### Ridding the World of Crime

"NOTHING. I was fortunate enough to inherit a legacy which is quite ample to finance my inventions and to take care of my needs. I intend to devote my entire life to ridding the world of rime"

devote my entire life to ridding the world of crime."
"Sounds very noble," Logan scoffed. "Noble but impractical. You have tackled an impossible job, young

man."
"In the lexicon of youth there is no such word as

"In the lexicon of youth there is no such word as impossible."

"If you're so smart, perhaps you will be good enough to let me know how you think this invention of yours—assuming that it really exists—will eliminate crime."

"I'll be glad to explain. One reason why crime is so prevalent today is that only a very small proportion of those who commit crimes are ever apprehended. And of those who are caught a still smaller percentage are convicted and punished."

"Granted. But how is your invention going to alter that?"

"By furnishing evidence which will make the discovery and punishment of every criminal absolutely inevitable."

"You seem to take it for granted that the courts will accept the so-called evidence of this contraption of yours."

"Why not?"

Logan smiled craftily and replied: "One reason why that sort of evidence will never be admitted in a law court is that a great many public officials and other influential men who presumably are above reproach really have skeletons in their closets."

"You ought to know," was Smith's impertient comment. "What of it?"

"Just this: An invention such as you describe—supposing that such a thing is possible—would be a mighty dangerous weapon if it happened to fall into the hands of unscrupulous persons."

"True enough. For that very reason I have taken

special precautions to safeguard my crime crusher."
"There's only one of these machines in existence, I presume."

"That's right."

"I suppose you are the only person who knows where this machine of yours is located."

"Correct."

"Not only that, but in case my crime crusher happened to be found by accident, no one else but me would know how to operate it."

#### An Attempted Arrest Foiled

"A ND if something happened to you the machine would be useless and the idea would be destroyed forever?"

"I'm afraid so-the way matters now stand."

Logan heaved a sigh of relief. "I'm glad to hear that, Mr—" he glanced at the card on his desk—"Mr. Lone Mongoose, because I'm afraid something is going to happen to you right now!"

"Just what do you mean by that?"

"I'll show you what I mean!" Logan snarled as he jabbed savagely at the button on his desk.

Into Logan's office stepped two burley detectives.

"Put this man under arrest, Lieutenant Cunningham," commanded the district attorney. "You, Ryan, slip the bracelets on him."

Cunningham laid a heavy hand on the young man's shoulder. But before the other detective had time to handcuff him, Smith grabbed the lapels of the lieutenant's coat and, with one foot in the big man's abdomen, dropped backwards to the floor. It was a perfectly executed "flying mare." Old as this well known wrestling trick was, it caught the detective unawares. Smith had no trouble in throwing Cunningham's bulk in such a way that it struck Ryan amidships and sent him too crashing to the floor.

Like a trained acrobat, David snapped himself to his feet and dashed into the corridor. Logan reached the door just in time to see the fugitive leap up the stairway, four steps at a time.

"Quick!" he yelled to the two detectives as they scrambled to their feet.

"He ran up those stairs! Catch him! Don't let him get away!"

By the time Cunningham and Ryan had reached the stairway, Smith was up two flights. With remarkable speed he continued to fly upward until he had put five stories between him and Logan's office. Then he walked calmly to the elevator and pushed the down button.

"Let me out at three, please," he said to the elevator

A few seconds, later he was right back where he had started from—in Logan's office. When the District Attorney saw him enter, his eyes seemed almost to pop out of his head. He tried to say something but all that came from his lips was an incoherent, meaningless gurgle.

The Return to the District Attorney's Office

"T CAME back," said Smith calmly," to let you know I that I eluded your men; and also to tell you that I have decided to give you one more chance to go straight and to do what is right. And now I shall bid you good day."

Logan found his voice long enough to stammer, "You won't get far. All four entrances of the building are guarded. The staircases and elevators are all

being watched. So is the roof."

"Thanks for the warning," said David, as he stepped to the window, threw it open and peered out. "You seem to have forgotten the fire escape. Fortunately for me, there happens to be one outside this window. Better think twice before you do any more fighting against the Lone Mongoose. Remember you have only one more chance to redeem yourself. So long! I'll be seeing you!"

As Smith stepped out onto the fire escape, Logan reached in a drawer of his desk and drew forth a formidable looking automatic pistol. He rushed to the window and opened fire on the young man as, with cat-like agility, he sped down the steel ladder. But none of his bullets took effect.

"Better practice up with that bean shooter," David shouted as he dropped unscathed to the ground and mingled with the crowd in the street,

#### CHAPTER II

#### A Tryst with Ruth

OOD afternoon," said a flute-like voice in the T telephone.

"Good afternoon, Miss Logan. This is Dave Smith. You remember me don't you? I met you this morning in your father's office."

"Of course I remember you. How goes the battle against crime."

"Not so well. That's why I 'phoned to you. Your father told me that you are somewhat of a reformer yourself. How would you like to give me some cooperation?"

"I'd love it! But I'm afraid you couldn't get much

help from poor little me."

"You're too modest. If you want to I am sure you can be of wonderful assistance to me. Are you willing to take a chance-for the good of humanity?"

"Try and stop me. What wouldst thou have me do?" "Have dinner with me this evening and I'll whisper the whole story in your ear. Please don't tell me you have a previous engagement."

"To be truthful I must confess that I have another engagement. Made it yesterday. But I just happen to remember that I have a previous appointment with you. I'll phone the other chap and break the glad tidings to him."

"Will you really do that? You're a treasure if there ever was one."

"You're not so worthless yourself. Where and when shall it he?"

"I'll call for you at six-thirty. Will that be all right?"

"O. K."

"And, by the way, I don't suppose your father is home yet is he?"

"No. He doesn't usually arrive until about seven. Why?"

"In case he gets there before I do, it won't be necessary for you to mention me to him will it?"

"Of course not. Dad knows I can look out for myself. He never meddles in my private affairs."

Precisely at six twenty-nine, David Smith rang the doorbell of Thomas Logan's sumptuous home in an exclusive suburb of the city. Womanlike, Ruth kept him waiting, and it was nearly seven when he helped her into his smart, little roadster. He had just taken his place at the wheel and was about to turn the ignition switch when an expensive sedan swung into the driveway leading to Logan's garage.

"That's Dad," Ruth told him. "I think he recognized me."

Even as she said this the large car came to a brakesquealing stop and Logan came running toward them. "Hello, Ruthikins! I thought it was you." Then he

saw Smith and his mouth opened wide in astonishment. "What? You here? And with my daughter. Of all the nerve!"

"Nerve is my middle name," Smith said blandly,

Logan grasped Ruth by the wrist and tried to drag her out of the car as he said, "Why Ruth! Get out of that car at once! What are thinking of? Don't you know that man is a crook and a blackmailer? I forbid you to have anything to do with him."

"Now Dad!" Ruth protested. "Don't be Mid-Victorian and melodramatic. You needn't worry about me. I can look after myself." Then, with a sudden jerk she wrenched herself free from her father's grasp and said, "Please drive on, Mr. Smith,"

David needed no second bidding. He let in the clutch and stepped on the accelerator. Like a whippet released from its cage, his tiny roadster leaped away from the curb. By the time Logan could collect his senses sufficiently to think of taking down the number of Smith's car, it had swung around the corner and disappeared.

#### Smith's Escape with Ruth

ALF an hour later Ruth Logan and David Smith were seated at a table in the famous Cosmopolitan Inn where the proprietor was a former Olympic champion and the waiters all sang grand opera with trays full of food in their hands.

"It was so nice of you to dine with me," David was telling her. "But don't you think you are a bit reck-

less?"

"Consider what a risk you are taking. According to your father I am a very desperate character-in league with gangsters and kidnappers and all that sort of thing. How do you know but that I am plotting to abduct you and to hold you captive, until I can extort a princessly ransom from your dottine parent."

Ruth laughed. "If you did kidnap me you'd drop me at the first telegraph pole. And as for ransom, I'm afraid you'd be out of luck. Dad would be more likely to pay you for keeping me from pestering him. And now suppose you quit your idle jesting and tell me how you want me to help you. I'm consumed with curiosity."

"I've tackled a man-sized job," David began. "I intend to eradicate all crime from the world."

"You sure *kave* picked a job. Ever since Cain put Abel on the spot, religious leaders, legal authorities, teachers and scientists have been trying to scotch crime and with what results? You know as well as I do that instead of progressing the crime fighters have been stipping backward."

"Nevertheless I purpose to wipe out all crime or perish in the attempt."

"I'm afraid your purpose is visionary. But there's no harm in trying, and I admire your determination. Do you expect to accomplish this impossible task single landed?"

"It looks as if I shall be forced to do most of it alone. I realize, of course, that I shall need all the help I can get. When I first started I was simple enough to believe that I could easily secure the cooperation of all honest, constituted authorities, but I soon become disillusioned."

"Why?"

"Because practically all of them are more interested in their own welfare than they are in the progress of the human race."

"I still don't understand."

#### Few Persons Want Crime Eradicated

"FEW persons really want crime completely eliminated for the simple reason that—in a greater or a lesser degree—they are criminals themselves. That's why they are afraid of my Crime Crusher."

"Your Crime Crusher? What in the world is that?"
"It's an invention of mine—the first step toward the fulfillment of what you call my visionary purpose. Shall I tell you about it?"

"Please do. But don't make it too technical. I'm awfully dumb when it comes to anything scientific."

"That I refuse to believe. Nevertheless, it will not be necessary for you to understand all the scientific details of my invention. They are a bit abstruse perhaps—for one who is not interested in science. But the principle of the Crime Crusher is really quite simple. Have you ever considered the way time moves?"

"I've noticed that time always moves very rapidly when I am having a good time, but how it drags when I am in the dentist's chair!"

"I wasn't thinking about the speed of time but rather

the direction in which it moves. Most of us think of time as progressing in a straight line. In reality, however, it moves in a curve. An interesting corollary to this theorem is the familiar expression that history repeats itself."

"But that statement isn't intended to be taken literally is it?"

"Of course not. I mentioned it merely toashow that the conception of curved time is by no means unusual. Our language is full of similar suggestions. For instance, when we speak of crime wwwst, periods of depression and economic cycles we are suggesting that the movement of time is curvilinear rather than rectilinear. Is my lecture all clear so far?"

#### The Curvilinear Motion of Time

"YES, Professor Smith. Pray proceed."

I "Very well, my child. Observe this anology: Time is like an endless strip of motion picture film up on a gigantic reel. We can't make the reel run backwards, nor can we look back for any considerable distance along the curved surface of the time film. But if we can find some way to bridge the short gaps between successive layers of the film we are then able to review the events which happen some time ago. Do you follow me?"

"At a distance. Slow up and perhaps I'll catch up with you."

"All right. To return to the anology of the motion picture: If you want to find out what happened in the middle of the reel it is necessary to unwind approximately five hundred feet of it. But if you had some way of peeping between the layers of film you could see the pictures in the middle of the reel without unwinding it. Does that make it any clearer?"

"In a way. But I don't get the connection between the motion picture film and your invention."

"The connection is just this: My invention is merely a device for bridging the short gaps between the successive layers of time as they are wound up on the great cosmic reel."

"But that sounds like a miracle. How do you do it?"

"The answer is that I have found a way of pene-

trating hyperspace."

"Hyperspace?" she questioned.

"Yes. You have heard of the fourth dimension, have you not?"

"I've heard of it, yes. But I'm afraid it is altogether too deep for me to grasp."

Just then the orchestra struck up a vivacious, tickletoe tune.

"In that case," David suggested. "Let's dance. What do you say."

"O. K. Professor!

When they returned to their table Ruth said, "Please tell me all about the fourth dimension."

"I'm afraid that is a big order for a dinner dance. Suppose we postpone the fourth dimension until I can give you a practical demonstration of how my invention works. I am sure that it will interest you."
"Then you are really going to show it to me?"

"If you wish to see it."

#### A Practical Demonstration of the Crime Crusher Proposed

"OF course I want to see it. What a thrill that will be! In the meantime, can't you at least tell me something about the practical use of the Crime Crusher?"

"With pleasure. You already know something about the Perguson kidnapping case. That was a good example of what my Crime Crusher can do. I had just finished my invention when the news about Jimmy Ferguson's disappearance broke. I focused on the place near the corner of Vine and Stanley Streets, where Jimmy was last seen. It was necessary to do a lot of experimenting before I got my time adjustment set right, but once I had caught Jimmy's image it was an easy matter to keep it on the screen.

"I saw an automobile pull up alongside of the curb. Two men jumped out, grabbed Jimmy and drove off with him. The license plate of the car was bent, but I could make out enough of the number to identify the automobile, especially when I found out where it went. On the screen of my invention I followed the car until it pulled into the driveway of the house on Boyle Avenne. Then I sent a note to the police describing the house and its approximate location and telling them that they would find Jimmy Ferguson there. You know what happened after that?"

"Yes. Three detectives followed up your tip, and

rescued Jimmy."

"Not only that, but they caught the two kidnappers red-handed."

"And do you think that is going to stop kidnapping

forever?" "Of course not. One swallow doesn't make a drink. But when crooks discover that they can't do anything without being found out and punished, I guess they will hesitate a long while before they commit any more crimes. That's the great trouble with the systems we have used in dealing with crime in the past. Only a very small percentage of the persons who commit crimes are ever apprehended. Even those that are caught know that, because of our present methods of administering what is facetiously known as justice. they stand a good chance of escaping the consequences of their misdeeds. Criminals know this. That's why they are so audacious and arrogant. The way to eradicate crime is to make arrest and severe punishment absolutely inevitable."

#### Making Arrest and Punishment Inevitable

"THAT sounds logical," Ruth assured him. "I don't see why every decent person in the world won't be glad to endorse it and help you to realize that ideal."
"I thought so too, until I sounded out a number of

persons who are supposed to be decent. One of the hardest jobs I have is to convince anybody that my invention will do exactly what I claim for it. I suppose it does sound a bit preposterous, but no more so than the radio would have seemed a hundred years ago."

"Can't you convince the skeptics by actual demon-

strations of your machine?"

"I don't dare to do that yet."

"Why not?"

"There's only one Crime Crusher in existence. If certain people knew where it is, my invention would be destroyed at once, I would probably be removed soon afterward and that would be the end of my dream."

"Isn't there some other way you can force people to believe you?"

"Tree tried everything I can think of. One of my first attempts was the Ferguson kidnapping case. Instead of appreciating the help I gave them, the police have been trying to apprehend me. They suspect me of belonging to the kidnapping gang. This morning I narrowly escaped being clapped into jail. At present I am branded as a fugitive from justice."

"But you can easily clear yourself."

"I'm not so sure of that. Even when I showed people photographs and motion pictures of past events taken with my machine, they wouldn't believe that they were authentic. In a way I can't blame them. It is true that pictures of that sort can be faked, you know. That's one reason why I'd like you to help me."

"And may I ask why—with over a hundred million persons to choose from—you happened to select poor little me?"

"There are two reasons. One is that you are the daughter of Thomas Logan."

"What has that to do with it?"

"I need his help in working out my immediate plans. He wouldn't believe me when I tried to tell him about my invention this morning; but I have hopes that he will believe his own daughter."

#### The Convincing of the District Attorney

"PERHAPS he will—that is if I am absolutely certain myself. What is the other reason?"

"The moment I met you I had a strong hunch that you are trustworthy."

"But how can you be sure of that when your have known me for only a few hours?"

"So far my hunches have been one hundred per cent dependable. On the other hand I have frequently been betrayed by men and women whom I have known favorably for years."

"It's very nice of you to trust me. I hope you will never regret it."

"I'm sure I shall not."

"Thank you. And now that we've settled that, what do you wish me to do?"

"I'd like to show you my invention. After you have seen it in operation and have convinced yourself that it does what I claim for it, you can tell your father all sedan swept past and disappeared in the night. about it: I hope you will be able to convert him and persuade him to cooperate with us."

"O. K. Dave," she said as she reached out her small but capable-looking hand. "Boy, but I like the way vou sav 'us'."

"I'm glad you understand that when I say 'us', I mean you and me."

"Thanks again, partner. I just can't restrain my avidity. When do we start putting your Crime Crusher through its paces?"

"Can you make it tomorrow morning?"

"Whenever you say. Tell me where and when to meet you."

"I'll be at your home between nine and nine fifteenif that isn't too early.'

It was nearly midnight when Smith's green roadster pulled up in front of the Logan residence.

"See you in the morning," he said. "And, by the way, you won't mention anything about our arrangement to your father or to anybody else, will you, Ruth?"

"Never a word will I breathe to a soul, Dave, me lad," she said as she tripped gaily over the stepping stones leading to her front door.

As he let in his clutch and stepped on his accelerator, David glanced into his rear-vision mirror. He was not surprised to see the lights of a large, black sedan, which was parked a few yards down the street, flash on and start after him, glaring angrily like the eyes of some weird monster.

To verify his suspicion, Smith made a complete circuit of the block. Those menacing headlights followed close behind him. Once satisfied that he was being shadowed, Smith led his pursuers a merry chase, turning corners on two wheels, clearing traffic signals by a hair's breadth and dodging precariously between other cars. Several times he managed to lose the sedan for a block or two, but invariably it would come looming up behind him as soon as the condition of the traffic would permit it to shorten the gap between them.

#### An Attempted Assassination

INSTINCTIVELY David headed away from the 1 business section of the city, where he knew he would have encountered many traffic obstructions. Soon he was tearing along an open road, with his pursuers right on his tail. Though he pressed his accelerator clear to the footboard, he was not able to increase the distance between his car and theirs. Instead, the high powered car gradually crept up on him. All at once the stuttering growl of a machine gun was mingled with the roar of racing motors. A row of neatly spaced holes appeared in the fragile panel behind Smith's head and back. He slumped forward against the wheel. Deprived of his guidance, the roadster left the highway, crashed through a fence and careened madly across the adjoining field.

With a final; spiteful spurt of gunfire, the big, black

#### CHAPTER III

#### Smith's Helicopter

T eight forty-five the following morning, while Ruth was eating breakfast, she was called to the telephone.

"Good morning," she sang merrily into the receiver. "This is Ruth Logan."

"Good morning, Ruth. Do you recognize the voice of your partner, Dave?"

"I sure do, and it sounds delicious. Don't tell me that you are going to stand me off for that date of ours,1

"Of course not. But I'm afraid I shall have to make a slight change in our plans, if you don't mind. You see I had a little accident last night and I'm not using my car today."

"Good heavens! I hope you didn't get hurt."

"Not seriously. You'll get the grewsome details later. What I want to tell you is that it may not be advisable for me to call at your home. Do you mind meeting me somewhere else."

"I'll be glad to meet you wherever you say."

"Then come to a vacant lot at the corner of Melrose and Fairfax Streets. It's only a few blocks from your home. You don't mind walking that distance do you?" "I should say not. When shall I be there?"

"As soon as you can. I'll be waiting for you with my helicopter."

"Your helicopter!" she exclaimed, "You're not kidding me, are you?"

"If you think so, come and see."

Ruth bolted the rest of her breakfast, changed her clothes like a fireman answering a midnight alarm, and strode forth from her home with the springy gait of a trained athlete. She had covered half the distance to the trysting place when she heard the hum of an aircraft motor. She watched the helicopter as it swooped down, clearing the telephone wires by inches and coming to a standstill a few feet from the place where its wheels first touched the ground.

Ruth broke into a run, reaching the aircraft just as the door opened and David stepped forth.

"What a thrill!" she panted. "You certainly are a man of many surprises!"

A few seconds later they were in the air.

Shouting in competition with the roaring motor, David inquired, "What happened after I left you last night? Did your father put you through the third degree?"

"Tried to," she yelled. "But I squelched him. He didn't worm any information out of me."

He reached over and gave her hand an approving pat. By this time they had climbed so high that the city beneath them looked like a huge relief map with toy automobiles crawling along its ribbon-like streets. They headed for the hills north of the residential section. Except for the narrow dirt roads which crawled up the slopes like loops of narrow, brown ribbon, no signs of human habitation were visible.

Near the crest of one of the peaks Ruth was surprised to see a level spot of green lawn. Hedged on all sides by tall, stately pines, the clearing could be seen only from directly overhead.

David did something to the controls and the helicopter began to loose altitude rapidly. Down it plopped into the dimunitive landing field, coming to rest a few feet from the edge of the woods.

#### A Helicopter Vertical Landing

RUTH climbed out and stretched herself.
"Is this as far as we go?" she asked.

"For the present, yes."

"A wonderful trip while it lasted," she remarked. "But why the airship for such a short journey?"

"I have to be careful."

"The reason I used the helicopter this time is to avoid being followed here."

He opened a gate which was cleverly concealed with green branches, revealing a small hangar nestled among

the tree trunks.

Then he lifted the tail of the aircraft and trundled it under cover.

Her eyes opened wide with amazement, Ruth looked about her and was surprised to see a large, two car garage and a tiny cabin which were so skillfully camouflaged that they were not discernible even from the air.

"Yours?" she questioned.

He nodded. "This is my hide-away. I don't care much for this hermit-like secrecy myself. Unfortunately I had to do something like this to protect my Crime Crusher from destruction."

"So you keep it here, do you?"

"Yes. It is semi-portable, you know. Right now it is installed on a special automobile chassis. Would you like to see it?"

"I'd love to."

He ushered her into the roomy garage building.

"I used this also as a laboratory and work-shop," he explained as he pointed to a bewildering array of apparatus on a bench running the full length of the structure.

There were two cars in the garage. One of them had a long, closed body which reminded Ruth of an ambulance, except that there were no windows in the rear compartment. She recognized the other one as Smith's green roadster. Though she gave it but a cursory glance, the row of bullet holes was too conspicuous to escape her attention.

"Oh! she exclaimed. "Those holes! They look as

if they were made by bullets!"
"They were," was his calm verification. "Machine

gun bullets."
"How in the world did that happen?"

"You'll learn presently. First let me show you my Crime Crusher."

#### Showing the Crime Crusher

H E opened a door at the rear of the large car and motioned for her to enter. What she saw meant very little to her. The only articles she recognized were two cameras, one for cinema film work and the other for making still pictures. The rest of the equipment consisted of an assortment of lenses, prisms, tubes and other apparatus the nature of which was unfamiliar to her.

"How do you operate it?" she asked.

"Everything, including the two cameras, can be operated from the driver's seat. I had to rig it up that way, because I have been obliged to work alone. Please wait here while I back it out."

He started the motor and swung the car around, so that it faced toward the landing field.

"Now look at the top of the car," he directed.

Watching, she saw a pipe about the thickness of a man's arm rise slowly above the roof of the automobile. At the top of this tube was a round object which sparkled in the sunlight. Its surface was covered with small knobs, reminding her of a large raspberry.

"See anything?" David shouted.

"Yes. It looks something like the periscope of a submarine."

"It works on the same principle as a periscope, except that it can peer into hyperspace. I can make it turn in any direction I desire by adjusting a small handle on the dashboard. Hop in next to me here, and I'll see if I can stage a demonstration."

Pointing to what looked like a large, circular, rear view mirror, mounted over the center of the windshield he explained, "This is my view finder. On it are projected the images which are picked up by the periscope."

He looked at his watch and made a quick calculation on a pad which was ingeniously attached to the steering wheel. Then he carefully adjusted four numbered dials and turned on a switch. Instantly a picture flashed upon the circular screen. There was nothing unusual about it, however. It showed exactly the same scene which was visible through the windshield.

"We may have to wait a minute or two until the past event I am fishing for catches up with us," he said with a grin.

#### Trying Out the Crime Crusher

WITH her eyes glued to the view finder, Ruth waited expectantly. Presently, over the image of the treetops appeared a tiny, moving speck. It resembled a diminutive windmill flying through the air with its vanes parallel to the ground.

"Looks like your helicopter!" Ruth exclaimed.

"That's just what it is," he informed her. "Watch!" Down swooped the airship, seeming to land only a few yards from the car. The door opened and out stepped a girl and a young man. David adjusted a focussing device and the faces of the two young people were projected there clearly and sharply on the screen.

"Why it is you!" Ruth cried. "It is you and I!"

David nodded. In the view finder Ruth saw reenacted every detail of their arrival a short time previous. "Marvelous!" was her only comment.

After they had seen a helicopter put away in the hangar, David switched off the projection equipment and said, "Would you care to see what happened to me last night?"

"I'd like to very much."

"All right. Let's go." And he started the motor.

"Can't you show it here?"

"No. In order to witness an event we must go to

the place where it happened." He drove down the narrow, winding, dirt road, finally turning to a paved highway which Ruth recognized as Roosevelt Boulevard. When he had almost reached the outskirts of the city, he turned around and headed back in the opposite direction. Presently he stopped beside the road and turned on the Crime Crusher but kept the motor running. This time it was a night scene which appeared on the view finder. Nevertheless the image was so vivid that even the small details were remarkable clear.

#### Reproducing on the Screen the Attack on David in His Car

TWO pin-points of light on the screen grew rapidly to the size of quarter-dollars. They were the headlights of a rapidly approaching automobile. David released the clutch and his car slid out on the highway. Behind them the gleaming headlights approached rapidly and David had to bear down hard on the accelerator to keep ahead of them. Steering with his left hand only, he twisted the focussing device with his right hand, until the man behind the wheel of the phantom car could be seen clearly enough to recognize his features.

Ruth gave an exclamation of pleasure. "It's you, isn't it?"

Absorbed in his tasks of driving the car at a high rate of speed and operating the controls of his invention at the same time, David answered her question merely with a nod.

He slowed up a trifle. The green roadster seemed to crash into the screen. Then it disappeared for an instant only to reappear with its rear end turned toward the view finder. In a similar manner the black sedan loomed up, vanished and flashed back on the screen just behind the smaller car.

When Ruth saw the staccato flashes of gun fire, puncturing the semi-darkness with their frenzied, murderous stabs, she gave a quick gasp.

"Merciful Heavens!" she screamed as David's car smashed through the fence and went bumping across the field. "They've killed him! They've killed him!"

She was brought back to reality by the touch of David's fingers on her wrist. He stopped the car and said reassuringly, "They didn't quite get me, though they came mighty close to it. Just watch the next thing." Ruth watched.

She saw the roadster coming to a jolting stop. For several breathless minutes it stood there with David's motionless head hanging limply over the steering wheel. Then he moved, sat up and looked about him. Seemingly satisfied that his enemies had gone, he drove slowly back to the highway.

"How in the world did you ever manage to escape?"

she asked.

#### David's Escape Described

"T WAS expecting something of the sort and I made preparations to protect myself. Under my coat I was wearing a bullet-proof vest. I also had on a specially armoured cap, lined heavily with woven steel. The bullets didn't penetrate it, but they clipped me in the head hard enough to stun me for a minute or two Otherwise I wasn't hurt."

Switching off the Crime Crusher he went on, "Have you seen enough to convince you that my invention actually does reproduce past events?"

"How can I help being convinced? It is positively

wonderful!" It was close to noon when Smith brought Ruth home.

As she stepped out of the car she said, "Thank you, David. I've had a wonderful time. As far as your Crime Crusher is concerned, I'm sold on it one hundred per cent. Maybe it doesn't matter much, but I'm also sold on you, young fellow."

"It matters a lot to me," David assured her.

"That's good. What do you want me to do now?" Smith handed her a flat, metal can.

"This contains a sixteen millimeter film which I made with the aid of the Crime Crusher. It shows just how the bombing episode for which Marvin Williams is on trial, really happened. Anyone who sees this film ought to be convinced instantly that Williams is innocent and that the real culprits are Crowder and Nelson. You have a sixteen millimeter projector in your home haven't you?"

"Of course we have."

"Can you arrange to run this film off to-night and have your father see it?"

"I most certainly can. Dad isn't much of a movie fan but I'll make him look at this one, if I have to drag him in by the heels and hog-tie him. Give me your phone number and I'll call you up and report his reac-

"That won't be necessary and it may be dangerous. I'll phone you to-morrow morning instead. And, by the way, you might tell your father that you have seen the Crime Crusher, and that you know it does just what I claim for it. He will probably ask you where it is located. Under no circumstances must you give him even the slightest hint. Will you promise me this?"

"I promise," she said, holding up her right hand.

"On my honor as a, a---"

"As a partner," David supplied.

"As a partner," she repeated. "I swear that I shall never reveal even the slightest hint of the location of your invention, on my honor as a partner."

#### CHAPTER IV

#### Treachery

TRUE to his promise, David called up the Logan phone number at about nine o'clock the following morning. It was answered by the butler, to whom Smith said, "I'd like to talk to Miss Ruth, if you please."

Finally a voice at the other end of the line said, "Hello! This is Ruth Logan talking."

"Good morning, Ruth. This is David."

"Oh, I am so glad you called. Something has hap-

pened. I must see you at once."

"Nothing serious, I hope," said David in an alarmed

voice. "Can't you tell me about it over the phone?"
"No. That's impossible. I must see you. Can't
you come over here right now?"

"You mean you want me to call at your home?"

"Why, yes. Yes, of course."

"Do you think that will be wise?"

"I don't see why you shouldn't meet me here.

You're not afraid, are you?"

"No. Not exactly afraid. Merely cautious. Judging from what happened the last time I came to your home, I think it will be more prudent to meet you somewhere else. You don't mind do you?"

"Not if you're afraid to come here."

"Why, Ruth! What has gotten into you? You're not angry are you?"

"Of course not. What makes you think that?"

"Because you talk so-so peculiarly."

"That's probably because I'm worried. Don't you want to see me?"

"Of course I do."

"Then where shall I meet you?"

"At the corner of Melrose and Fairfax Streets, where I met you yesterday with the helicopter."

"You are not going flying today are you?"

"No. This time I'll have my car. It will take me about ten minutes to get there.'

"All right I'll meet you then."

"And you'll be alone?"

"Certainly I shall be alone. Whatever possessed you to say that?"

"Oh, I don't know. Just a premonition I guess."

"Don't be silly. See you in ten minutes. Goodbye." When David parked his car at the corner of Melrose and Fairfax Streets there was no one in sight. He had been waiting about five minutes when he was astonished to see a familiar looking sedan swing around the corner a block away. Thomas Logan was driving, Sitting beside him on the front seat was his daughter Ruth. So shocked was David at this unexpected sight that he did not notice another large car which had si-

lently crept up behind him. Could there be treachery.

#### David a Prisoner in the Hands of the Police

An instant later, his roadster was surrounded by uniformed policemen. Before he had time to touch the starter, they had wrenched open the door of his car and had snapped a pair of handcuffs on his wrists. Then they dragged him out and bundled him unceremoniously into the police car, David looked in vain for Logan's sedan. It had disappeared.

Like the excruciating pain of a rattlesnake's bite, the pangs of distlinatoment and despair stabbed relentlessly at David's heart as he rode toward police headquarters. It was bad enough to have his work imperiled by this disastrous arrest, without having the added torture of knowing he had been betrayed by one whom he had trusted so blindly.

He tried hard to excuse Ruth and to convince himself that the appearance of the police at that particular time and place was merely a coincidence. If he had any doubts about her perfidy they were removed completely a half hour later, when, flanked by two policemen, he was confronted by Logan himself.

"Good morning, Mr. Snake Hunter," the District Attorney sneered. "How does it feel to be hunted, for

a change?"

David made no reply.

Logan picked up a length of rubber hose and with it struck the young man a vicious blow on the cheek. "Make dates with Ruth behind my back, will you?"

he howled. "Try to turn my own daughter against me, will you, you dirty skunk!" and he struck Smith with the hose again and again.

For a minute or so, David bore the blows in unflinching silence. Then he suddenly emitted an unearthly yell and at the same moment, wrenched himself loose from his two muscular captors.

Logan was so surprised and so frightened that he jumped backward without looking where he was leaping. He stumbled over a chair and sprawled to the floor in a most undignified attitude. Even the two policemen couldn't help grinning.

When Logan picked himself up he was so furious that he almost frothed at the mouth. Nevertheless he made no further use of the hose. Instead he employed another instrument of torture, namely his tongue, which singular as it may seem, hurt David a great deal more than the physical punishment did.

"You thought you had persuaded Ruth to work against her own father didn't you?" he stormed. "Well you made a big mistake, you half-baked whippersnapper! Instead of betraying me she betrayed you! Do you hear that? She betrayed you! She told me all about your hide-out in the mountains north of town and east of Roosevelt Boulevard. I have already sent ten air planes to search for it with orders to destroy everything they find there. And as for you—you'll be lucky if you don't hang—or at least spend the rest of your life in the penitentiary."

#### Logan's Threat of Hanging for David

TANG?" David stammered. "What am I supposed to hang for?"

"For murdering Whipple, the service station man. That motion picture film which you gave Ruth last night may be used as evidence against you."

"You're either crazy or else a fool," Smith retorted.

"You'll find out who's crazy before I get through with you," Logan threatened. Then to the policemen he said, "Take him away and lock him up."

David got his first taste of imprisonment in what was called a "tank." Here, in a large cage, such as are used for confining wild animals, were crowded together twenty or thirty men of varying ages, races and conditions.

As David was thrust into the tank the handcuffs were removed; the other occupants looked at him with surly antagonism. Only one of them showed the slightest indication of friendliness. He was a small, dapper Filipino. Dressed immaculately in flashy suit of robin's-egg blue, he seemed singularly out of place amid these squalid surroundings.

Producing from an inner pocket a small case which he had succeeded in holding out when he was searched, Smith extracted a cigarette and lit it. The Filipino looked at it longingly, but said nothing.

"Have one?" David offered.

On the face of the little brown man a broad grin exploded.

"Tanks, mister," he said. "Tank you bery, bery mush."

Smith was just about to strike a match to give the boy a light when the hulking form of a man appeared outside the bars. It was Cunningham, Logan's special investigator, the man whom David had humiliated in the District Attorney's office.

#### Logan's Special Investigator, Cunningham, Appears

"UNNINGHAM paid no attention to Smith, but ✓ called out in a loud, hoarse voice, "Oh, Pop-Eye!" "Wuddier want?" snarled a brawny, heavy-jowled man as he slouched belligerently toward the bars.

"Thought you might be interested in getting acquainted with your new tank-mate," Cunningham remarked as he pointed with a fat cigar-stub in the direction of Smith. "Do you know who that guy is?"

"How should I know?" Pop-Eye growled. "Never seen him before."

"Oh, no? Then let me put you wise. He is that guy with the funny name-Lonely Goose, or something like that-the one that tipped the police off as to the place where you and Hugo had the Ferguson kid hid out."

"What!" the ruffian exclaimed. "That guy! In here alone! With us?"

"Sure! Why don't you go over and have a little chat with him?"

"Say, dick, are you trying to kid me or something?"

"I'm not kidding."

"And you won't do nothing to us if we slug him?" "You can bet your life I won't. We don't like him

any better than you do. Help yourself." "Thanks, Flatfoot," said Pop-Eye as he licked his

thick lips and began to roll up his sleeves.

Entirely oblivious of the danger that threatened him, Smith sat on the rough wooden bench and blew smoke rings. His first warning came when he looked up to see a huge, lantern-jawed man towering over him. Flanking him on either side were two other ruffians. equally large and pugnacious.

"Know who I am?" the one in the middle demanded. "Sorry," Smith said aimiably. "Don't believe I've

ever had the honor. But your face looks familiar. I must have seen your picture in the newspapers." Without further ado, Pop-Eye gathered together the

bosom of David's shirt in one hairy hand and lifted him to his feet. Then he struck him with his free fist so swiftly that Smith had no time either to guard himsedf or to dodge.

As he crashed to the cement floor, one of the other prisoners gave him a vicious kick in the side. Then his first assailant leaped on top of him and started to pound his head against the concrete. Powerless to defend himself, David was almost ready to give up the struggle when a miracle happened. As if my magic, the brutal hold on his head relaxed. David looked up to see the huge form above him sway to one side and topple over like a sack of meal.

He lost no time in staggering to his feet. Before he had time to brace himself the other two brutes were upon him. Backing into a corner he fought them off valiantly. He managed to land one lucky blow, which made the man called Hugo stagger but when David rushed forward to follow up this advantage, the third ruffian got behind him and struck him a terrific blow on his left eye. Blinded and groggy, David tried desperately to fight his way back into his point of vantage in the corner, but his two antagonists outflanked him, raining savage blows on him from all directions.

For the second time he sank to the floor, stunned and defenceless. "Now they will finish me," he thought. But the blows he waited for in helpless dread did not materialize. Instead he heard strange noises.

In the tumult that engulfed him he made out a few intelligible words. They were, "Atta boy, Speedy!" "Sock him in the breadbasket, Speedy!" "Now give him the haymaker!"

#### The Filipino to the Rescue

RAISING himself on one elbow, Smith saw an astonishing sight. Like a bantam rooster fighting with a pair of angry wolves, the little Filipino was dancing around the two big bruisers who had aided Pop-Eye in his assault on David. Roaring obscene oaths they flung their huge fists at him but each time he was just a fraction of an inch out of range. Then he would dance gracefully in, leap in the air and deliver a telling blow on the chin, nose or body of first one opponent and then the other.

Two of the other prisoners picked David up and led him to the bench.

"Let me go. I'm not through yet," he cried as he got up and staggered drunkenly toward the place where the Filipino was putting up his gallant fight. David had gone but a few steps when his way was barred by Pop-Eye, who had recovered consciousness and had scrambled to his feet. Putting all his strength he could summon into his left arm, David brought his fist around in a long swing and landed it full on Pop-Eye's massive jaw. The kidnapper's knees gave way and he pitched forward on his face.

Bracing himself with his hand against the wall, David walked slowly and shakily to join his brown-skimed champion. But the tiny Filipino didn't seem to need any help. By the time David reached his side, Hugo was bying unconscious on the floor and the third gangster was running around the tank yelling for mercy, with the little brown boy at his heels. Finally a group of the prisoners got in his way so that he could not escape and "Speedy" gave him a neat finishing blow square in the solar plexus.

David grasped the bruised hand of his new friend and said, "Thanks, old man. You certainly did me a good turn."

"Oh, das aw right!" the Filipino grinned. "Me like fight! The fight, she is my bizziness. Me Speedy Armando!"

"You! Speedy Armando? The light-weight champion of the west? Boy, oh boy, but was I in luck? No wonder you handled those big bruisers the way you did."

"You no such bad fighter you-self," the boxer complimented him. "If you not have tree men to fight all same time you not need no help from Speedy."

"I'm not so sure of that," David confessed. "Anyway I'm mighty grateful to you, Will you have another cigarette?"

#### The Interview with Ruth Logan

H ALF an hour later, one of the jailers came to the tank and called to David, "Hey, Smith! You're wanted at the office."

"Here's where I get the works, I guess!" he grinned as he shook hands with Armando and added, "Good

luck to you, Speedy. Maybe I can help you some day."

Accompanied by two armed guards, he was conducted to a small reception room. When he entered it he was astounded to find himself face to face with Ruth Loran.

"So," he said icily. "It's you, is it?"

"Yes," she said simply. "It is I. Aren't you glad to see me?"

"I don't know any reason why I should want to see you. Now that you have betrayed me and have probably brought about the destruction of my invention, you ought to be satisfied." "But, David! Won't you listen to me? I want to explain to you how it happened."

"Explanations are hardly necessary," he said bitterly. "All I know is that you betrayed the trust I put in you. After you swore on your honor that you would never——"

"But, David! I can explain all that-if you will only give me a chance."

"Never mind. I've learned my lesson. Never again will I trust a woman."

"Very well then. If you won't let me explain, will you at least let me help you?"

"So far your help has been of a very doubtful character," he told her. "How can you expect me to trust

you again?"
"Please, David!" she said as she drew close to him.

"Please don't talk like this. I came here to help you."
"How can you help me now?" he demanded.
"By getting you out of iail. Don't you realize how

important that is? You must go and save your invention before it is found and destroyed."

"Isn't it rather late for you to be so solicitous concerning the safety of my invention?"

Instead of answering him she pleaded, "Please, David! Let me help you get out of here and protect your crime crusher before it is too late. Don't you realize that the whole future of the world depends on it?"

"I realize that, all right. But how can I be sure that you are not scheming to lead me into a trap?"

"This ought to convince you," she said as she opened her handbag furtively and drew forth a small but efficient-looking automatic pistol. "Take this. It is your passport to freedom."

He took the gun, removed the magazine to make sure it was loaded, slipped the clip of cartridges back in place and said, "Thanks. Perhaps this will come in handy." Then with a sideways glance at her he added, "Are you sure your father didn't tell you to do this?"

"Of course not. I planned it myself. If I could only convince you that I am doing this to make up for the bad things I was forced to do against my will,"

"Do you mean to say your father doesn't know you are here?"

"Of course he doesn't. He'd never permit it if he did."

"Then how did you obtain permission to see me?"

#### Bribery

"BRIBERY," was her bland admission. "This time the jole is on Dad. I bribed my way in here with his money. But our time together is limited, so let's talk fast. Everything is arranged. When I leave here, I shall go right to my car and drive it slowly through the alley south of this building. In going from here back to the tank you will pass a short corridor running at right angles to the main one. At the end of that passageway is a heavily reinforced door leading into the alley. They sometimes use that door in take

ing prisoners to the courthouse. Except during those rare times it is kept locked. I have arranged for it to be left unlocked—with the key in the lock—on the outside. Do you gather the significance of the scenery now!"

"I'm beginning to."

"Very well, then. When you come to that side corridor, draw your gun and make your two guards hold up their hands. Then back down the passageway and through the door. Lock it behind you. The only way the guards can get out will be to run clear to the front of the building. By that time we'll be several blocks away."

"We?" David questioned. "Whom do you mean by

'we'?"

"I mean you and me, of course. When you come through that door into the alley you'll find me right there. I'll be at the wheel of my car with the motor running. All you need to do will be to climb into the runnibe seat and pull the cover down shut. As soon as we are out of danger I'll let you out."

"But why all those precautions?"

"Tve tried to anticipate every possible contingency. When you get away from the guards they may be smart enough to send out a general alarm and to throw a cordon of police around this section of the city before you have time to get out of it. But, hidden in my car, you'll be safe. Nearly all the police officers know me and they would never think of stopping me and searching my car. What do you say? Will you do it?"

For a few seconds David looked straight into her clear, blue eyes. What he saw there prompted him to say, "It's hard for me to believe that you could betray me a second time. Maybe I am a fool, but in spite of all you have done, I'm going to trust you once more."

"Thanks, David. And when you know all the truth, perhaps you will find it in your heart to forgive me for what has already happened."

There was a soft rap on the door.

"That's the signal," she whispered. "I must hurry and get my car. Try to stall as long as you can to give me time to get around to the alley. So long, and good luck!"

Ruth had scarcely left the room when the door opened again and the two guards entered. "Come on, Smith," one of them said. "Make it snappy."

"Just a minute, officer," David stalled. "My shoestring is untied." He put his foot on a chair and with exasperating deliberateness, began to tie the lace.

"Never mind that shoe-stroing," one of the jailers growled as he took David's arm and started to drag him toward the door.

"What's the hurry? You don't mind if I have a little smoke, do you?"

Without waiting for permission, David took a cigarette from his pocket and was about to light it, when the guard knocked the match out of his hand.

"Come on," he snarled. "Come on and quit your stalling."

Holding Up the Two Guards-The Locked Door

WHEN he reached the transverse corridor, David gave a sudden twist, wrenching himself free from the hold which the two guards had on his arms. Then he whipped out the automatic pistol and commanded, "Up with your hands."

With ludicrous eagerness the two officers reached for the ceiling.

"Now turn around with your faces toward that wall and stand right where you are until I tell you to move."

They obeyed promptly but turned their heads so they could watch him out of the corners of their eyes. David backed slowly down the passageway until his heel touched the door. Then he reached behind him with his left hand and turned the knob. First he pulled and then he pushed but the door did not budge.

It was locked!

Shocked by this disconcerting discovery, David permitted his eye to wander for a split second away from the two jailers. That was all they needed. With amazing agility they leaped to one side, out of David's sight and into the protection of the corridor walls.

From the main hallway came loud shouts and sounds of running feet.

An intense feeling of nausea came over David as he realized that he was caught like a rat in a burrow with escape cut of in all directions.

There was an ear-splitting detonation and a bullet thudded into the door, a few inches from his head. Then followed more shots in rapid succession. David's knees crumpled and he sank to the floor.

#### CHAPTER V

#### The Drug of Betrayal

AZED, but still conscious, David Smith lay huddled on the floor of the jail corridor. In his right hand he still clutched the pistol which Ruth Logan had given him. Slowly and shakily, he raised himself on his left elbow. The two guards had started toward him but when he raised his head, they darted back to the cover of the main hallway.

Behind him, the young man heard the rasping click of a lock being opened. Turning to face this new danger, he saw the massive door swing outward. He caught a glimpse of a tiny, sandal-shod foot and the hem of a blue dress—exactly the same shade as the one he had seen Ruth Logan wearing a few moments before.

Before he had time to do anything himself, a pair of small, but capable hands grasped his arm and dragged him out into the open air. The door slammed shut, the key grated and the bolt shot home. From within the building two mulffel shots rang out. Someone pounded on the door, yelling frantically and incoherently.

David looked up into the anxious eyes of Ruth Logan. "You?" he muttered bitterly. "You again? Why do you insist on torturing me this way—like a cat playing with a mouse?"

Disregarding his accusation, she exclaimed, "David, my darling! Thank God you are not dead! But we must hurry and get away from here! My car is right over there. Let me take you to it." Bending over, she ran her hands under his armpits and tried to lift him, but he was too heavy for her.

"I'm all right," David protested. "Let me alone—will you please?"

He struggled to his feet and started to stagger along the alley.

"Not that way," Ruth cried as she ran to him and took his arm. "Can't you see my car? It's right there! Quick! Get into the rumble seat! We haven't a second to spare!"

#### The Escape in the Rumble of Ruth's Car

SMITH started to protest that he could look after himself, but she would not let him go. Coaxing him with importunate words and tugging persistently at his arm, she managed to get him to the car and into the rear seat.

"Now lie down and keep out of sight," she commanded him. "I'll leave the lid open just enough so you can breathe."

The car had hardly joined the dense traffic of the downtown business street, when the air was made hideous by the sound of several sirens, all wailing at once. Dashing through a signal a split second after it had changed, Ruth swung into the car-track and sped past a line of waiting automobiles.

At the next corner the traffic was dammed by six policemen, who carefully scrutinized all the passengers of the automobiles and street-cars before permitting them to pass.

"They sure worked fast," Ruth mumbled to herself.
Fortunately she recognized one of the officers in the
cordon.

"Hello, Sergeant Matthews!" she called out to him.
"What's the trouble?"

"Oh, hello, Miss Logan," he grinned. "It's a jailbreak, Haven't seen anything of a tall young fellow

with dark red hair, wearing a blue denim jail suit have you?"
"Not lately," she fibbed. "How about getting

through? I have a heavy luncheon date,"
"Sure! Sorry we detained you. Seeing it is you,
we'll let you pass the street car on the left side this

time."
"Thanks a lot, sergeant. I'll tell Dad how nice you

Forsaking both the business and the residential sections of the city, Ruth headed for the industrial district. It wasn't long before she had found a secluded spot near a vacant factory. Parking her car behind the deserted building she jumped out and opened the cover of the rumble seat. "Are you all right," she asked anxiously.

"Sure I'm all right—physically at least. Mentally I'm all ticker-tape."

He was holding a handkerchief against the side of his head. There were red stains on it. Gently but firmly, Ruth pulled his hand away.

"I thought so," she said. "You are wounded."

"It's nothing but a scratch," he protested. "A slug clipped me on the side of my head. It made me groggy for a while but I'm all right now. Lucky for me I have a thick skull."

#### The Strange Interview with Ruth Logan

"BETTER let me dress it for you anyway," she insisted.

"Why do you pretend to be so solicitous about me when you know very well that you deliberately betrayed me?"

A hurt look, like that of a whipped poodle, came into her sea-blue eyes as she murmured, "I don't blame you for saying that. Perhaps I deserve your contempt. But I wish you would let me explain."

"What's stopping you?" David said. "Despite all you've done to me, I can't help feeling grateful to you for getting me out of jail. Now it looks as if I am at your mercy. It's a long walk back to town, you know."

"Then you will listen to me-you will believe what I tell you?"

"I'll listen, but I won't promise to believe you—unless you are a much better liar than I think you are."

"Suppose I admit that I told my father about the trip I took to your hide-out—what would you say then?"

"Merely that you are mentioning something I already know."

"But suppose I swear that I was forced to betray your confidence absolutely against my will and in spite of everything I could do to prevent it."

"What are you talking about?" he scoffed. "Don't try to make me believe that your father—who pretends to be so crazy about you—put you through the third degree. Even if he did, you didn't need to—"

She interrupted him with, "Of course Dad didn't give me the works, as he calls it. But he did something almost as bad."

"What do you mean."

"He tricked me into letting a doctor drug me."

"Drug you?" he derided. "What in the world are you talking about?"

"When Dad got home last night he asked me if I had been with you. I followed your instructions and told him about seeing your wonderful machine work. But before I could gest him to look at the film you gave me, he started to cross-question me. Naturally he asked me about the location of the crime crusher, and, of course, I refused to tell him. When he learned that he couldn't worm any information out of me, he called up a doctor named Stone. Maybe you've heard of him. He has some sort of laboratory job in connection with the Police Department."

"Yes, I've heard of him. And what did Doctor Stone do?"

"He examined me with a lot of funny instruments and tried to make me think there was something wrong with my nervous system. According to his diagnosis, I needed a hypodermic of some sort. I balked at this, but Doctor Stone and father argued so persistentlythat I finally gave in."

"Then what happened?" David prompted.

"Doctor Stone produced a needle. After a lot of fussing around he injected something in my arm."

"Did you find out the name of the drug he used?" David asked.

"I tried to, but he evaded my questions,"

"But you saw the stuff, didn't you?"

"Yes." "What did it look like?"

"It was a small tablet. He joggled it out of a glass vial into the barrel of the syringe. Then he screwed in the plunger and called for some boiled water. After he had drawn some of the water up into the syringe, he shook it for a while and then jabbed the needle in my arm."

"How about the label on the vial? Did you see that?" "Not all of it, but it began with S-C-O-O-P."

"Are you sure it didn't commence with S-C-O-P?"

"Maybe so. Scoop or scop-what's the difference?"

#### Ruth's Hypodermic Was Scopolamin

"HE stuff he gave you was probably scopolamin," ■ David informed her. "It is one of the drugs used for producing the condition known as 'twilight sleep.' Sometimes the police use it. The dope is supposed to make people tell the truth."

"I'm glad you know about it, David. Perhaps you'll believe me now."

"Perhaps I shall," he agreed. "Tell me how the

drug affected you." "It made me feel drowsy at first-sort of lightheaded you know. I curled up on the davenport and dozed off. They let me alone for a while, then they shook me and woke me up. Dad started firing questions at me and before I realized what I was doing I was answering them. I was sort of dopey, you understand. Part of the time I had the feeling that I was doing something I shouldn't do and yet I couldn't help it. I've never been drunk, but from what I have seen of inebriated persons I imagine it was something like the effects of intoxication. You understand, don't you, David? I had a sort of I-don't-give-a-hang-what-I-donow attitude."

"Yes, I understand," Smith said with deadly seriousness. "So that's what Thomas Logan did to you? If he wasn't your father, I'd-"

"Please!" Ruth protested. "After all, he is my father. He must have thought he was justified-"

"Justified nothing. How could anything justify a scurvy trick like that? Nevertheless, I suppose I ought to be grateful."

"Grateful? Grateful for what?"

"Grateful because my faith in you has been restored -partially." "Only partially?"

"Well there were other things that haven't been explained."

"Meaning?"

"This morning you told your father where I had agreed to meet you. Not only that but you drove right past me in his car."

#### The Incident of the Meeting of the Cars in the Morning

"WHY David Smith! What in the name of Heaven are you talking about?"

"About this morning, when I phoned you and asked you to meet me at the corner of Melrose and Fairfax. Ten minutes later I saw you drive by in your father's car. Then the police arrived and nabbed me, You weren't under the influence of a drug this morning were you?"

"Of course not. The effects of the hypodermic wore off in a couple of hours."

"Then why did you give away our rendezvous?"

"I didn't. And furthermore I didn't even talk to you over the phone this morning."

'Somebody did. And it certainly sounded like you." It must have been mother. Our voices are very similar. Many of our best friends can't tell us apart when we talk over the phone. Dad probably put her up to impersonating me. As for my being in father's carthere's nothing incriminating about that. I often ride to town with him. I did notice that he went by a different route from the one he usually takes, but I never thought of looking for you."

"Do you mean to say that you didn't even see my car parked there?"

"If I did I thought nothing of it. I wasn't expecting you and there are hundreds of green roadsters in this neighborhood."

"Then you didn't really betray me after all?" "Of course I didn't. As soon as I found out that

you had been arrested, I got busy and started pulling some wires.

"You know what happened then."

"Yes. I know what happened. When I followed your instructions, I stepped right into a dangerous trap. You said the door would be unlocked. It was a miracle that I didn't get myself shot."

"I know. But please don't blame me for that. Naturally I had to leave some of the details to others. The dumb-bell who agreed to take care of the door put the key in the lock as he promised to, but he forgot to unlock the door. I drove into the alley as I said I would and sat waiting, with the motor running and my foot on the clutch-all ready for a quick getaway. Then I heard the shots and realized that something was wrong.

"I piled out and found the door locked,"

#### The Mystery of the Locked Door

I N a contrite voice, David added, "And then you risked your own life to drag me to safety. I'm afraid I have acted like an ungrateful wretch. Can you ever foreive me?"

"Of course I forgive you," she smiled. "Nobody could blame you for thinking what you did."

"I'll never doubt you again," he promised.

"O. K., partner. And now, where do we go from here?"

"Would you mind driving me to the corner of Melrose and Fairfax where I left my car?"

"Aren't you afraid to go back there?"

"I'm willing to take the chance. Sometimes the police are dumb. The best way to elude them is to do the obvious thing. I doubt if they thought of watching my car. Suppose we go back there anyway and take a look-see."

When they were under way Smith remarked, "I don't suppose you had an opportunity to show that film

to your father last night."

"No, David. Sorry I had to fall down on the first assignment you gave me. With all the nagging and the rigmarole I went through last night I didn't get a chance to make Dad look at the film."

"That's all right, Ruth. Do you think you will be

able to do it to-night?"
"I hope so."

"And you'll be careful not to let him drug you again."

"If he tries it I'll leave home for good."

"Let's hope that won't be necessary. Of the information revealed to your father only one thing is really serious."

"I suppose you mean something about your crime crusher."

"Yes, Especially the location of my hide-way. Your father told me he had sent a dozen planes to hunt for it. For all I know they may have found it by this time. Perhaps they have already destroyed the crime crusher."

"Oh!" she exclaimed. "That would be terrible! If I were you I'd defend that invention of yours with a

machine gun if necessary."

"That would hardly be feasible. If I tried anything like that I'd end up by having all the army and navy air forces swooping about my place. My job is to prevent crimes—not to commit them."

"Oh, dear," Ruth moaned. "Why did I let them give me that hypodermic? If anything happens to your crime crusher I shall never forgive myself."

David gave her a consoling pat on her wrist and said, "Please don't feel badly about it. After all, it wasn't your fault. For my part I'm not worried about my crime crusher."

"You aren't worried?" was her incredulous exclamation. "You know that your great achievement is in danger of being destroyed and still you say you aren't worried." "No," he reiterated. "I'm not worried—at least not very much; and I'll tell you why." And then he leaned over and quietly whispered some-

And then he leaned over and quietly whispered something to her in her ear.

With eyes beaming, she turned and stared at him so intently that she almost ran into an electrolier. "Is that a fact?" she chuckled.

"Abso-bloody-lutely," he declared.

#### CHAPTER VI

#### The Raid on the Hideaway

A S he had anticipated, David found his car unguarded.
"Where are you going now, David?" Ruth

"To my cabin in the hills. Hope I don't get there

too late."
"Won't you let me go with you?"

"Why?"

"Perhaps I can help you."

"I'd like to take you with me, but--" He hesitated.
"I know what you were going to say. You don't trust me."

"Not that exactly. But there may be some danger. I don't like you to--"

"If that's your only reason you may as well make up your mind right now that I am certainly going with you."

"But what about your own car?"

"I'll leave it here. It will be O. K."

On the way to Roosevelt Boulevard they stopped at a roadside stand and ate a couple of barbecue sandwiches.

Ruth phoned to her mother telling her that she would not be home to lunch.

At the clearing in the hills everything seemed to be in order. Before opening the door of the garage, David slid back a secret panel near the ground and pulled a lever.

"Does that turn off the device you told me about?" Ruth asked.

He replied in the affirmative.

When he unlatched the door and disclosed the car containing the crime crusher, Ruth heaved a sigh of relief. "Thank goodness it is safe."

She had scarcely uttered these words when she was startled by the sound of an airplane motor.

David hurried to the door of the garage and looked up at the sky. Flying only a few hundred feet above the treetops, a low wing monoplane was circling around the clearing, banking so steeply that its wings were almost vertical. Suddenly it came out of the bank and flew across the middle of the field. An object shaped like a cucumber with four fins at the top end dropped out of the plane and sped earthward.

"Quick!" he yelled. "Flat on the ground!"

"What's the idea?" she started to protest. But he silenced her with one ominous word: "Bomb!"

#### A Smoke Bomb from an Airplane

 ${\bf B}^{\rm REATHLESSLY}$  they waited, expecting to hear a terrific explosion. Instead there was a dull thud, followed by a fizzing sound that was almost inaudible.

Smith looked up. A column of black smoke was

curling upward from the place where the bomb had struck the ground,

Jumping to his feet, he fetched a fire extinguisher from the garage and played a stream of the white fluid on the smoldering bomb.

"What is it?" Ruth asked.

"A smoke bomb. It probably is a signal. Looks like a sheriff's posse is after me. This is a tricky place to find in an automobile but the smoke will probably help to guide them here."

"Do you think they will find us?"

"They are bound to eventually. It is quite apparent that they have the place spotted."

"What are you going to do about it?"

"I'm afraid there is nothing to do now but wait."
From a box in the garage he filled his pockets with
round objects about the size of baseballs. Then he
closed the door and adjusted the lever beyond the secret
panel. Taking Ruth's arm he led her along the edge of
the field to a place where the underbrush was unusually
dense. Soon they were ensconced behind a screen of
leaves, through which they could see the cabin and the
garage while remaining out of sight themselves.

The airplane flew back over the clearing, dropping two more smoke bombs. Smith made no attempt to extinguish them, Soon a bell started to buzz,

"My alarm," David explained. "It means that a car is coming up my private road."

A few minutes later they heard the noise of gravel rattling against fenders and a touring car hove into sight. In it were six men. The driver remained at the wheel but the other five leaped out of the car and crept stealthily toward the cabin. They were armed with revolvers and sawed-off shotguns. Peering through the windows, they soon satisfied themselves that the one-room hut was empty. Then they went to the garage and attempted to open the door.

There was a hissing sound. From openings near the roof of the building several thin jets of liquid shot out, changing instantly to a heavy bluish gas which completely enveloped the five men. For a second or two they staggered about, cursing sleeply. One of them pulled the trigger of his gun and the roar of the report was echoed back and forth by the forest walls. The blue vapors clung to them tenaciously, seeming to push them down until they were all lying motionless on the ground.

The driver of the car got out to investigate. When he saw the prostrate bodies of his five companions he started toward them, then changed his mind and ran back toward the automobile.

David stood up. In his hand was one of the balls which he had taken from the garage a few minutes before. With deadly aim he hurled it, Striking the ground between the car and the fleeing man, the sphere burst, releasing a cloud of azure vapor. The driver stumbled and sprawled on the ground. He tried to raise himself on his hands and knees but the gas got the best of him. Limbly he rolled over and lay still.

In a gaspy voice Ruth said, "Are they dead?"

#### The Gas Bombs

"OF course not," David laughed. "I hope you don't think I am a murderer. That gas is merely a powerful but harmless sedative. They are only sleeping. In two or three hours they will wake up none the worse for their little nap."

"Now what are we going to do?"

"I'm afraid I'll have to abandon this plant of mine. I can't very well remove the field and the buildings. Luckily I prepared for a contingency of this sort. I have another place I can go to that is almost as good as this one. Would you mind helping me move?"

Together they dismantled the laboratory equipment. Part of it they stowed away in the helicopter and the

rest in the back of the green roadster.

When this had been accomplished he said, "First I am going to ditch my roadster some place where I can come back later and pick it up. We can save a little time if you will trail me in the crime-crusher car. Would you mind doing that for me?"

When they returned ten minutes later they were greeted by a chorus of loud snores which told them that the unbidden guests were all sleeping soundly.

"What else can I do to help you?" Ruth asked.

"I'll have to move the helicopter. Would you mind driving the crime crusher car?"

"Are you sure you can trust your great invention to my care?"

David looked earnestly at her as if he expected to

read the answer in her own blue eyes. What he saw made him answer, "Yes, I feel sure I can trust you." "Thanks, partner," was her grateful response.

"Where shall I meet you?"

He named a place about ten miles away.

David set the craft down in a field which had at one time been a small private airport, but which now was overgrown with rank weeds.

He trundled the helicopter into the delapidated hangar and departed on an old, rusty bicycle which he found there. In about half an hour he reached the rendezvous where Ruth had agreed to meet him. There was no sign of the crime crusher car.

#### More Mystery in the Broken Appointment

D AVID waited—resignedly at first, then impatiently. Finally, after forty minutes had passed without bringing either Ruth or the crime crusher the maggots of anxiety and despair began to gnaw at his heart.

Mounting the bicycle again he pedalled to the place where he had left his roadster. He half expected to

find that gone also and was very much relieved when he located it and convinced himself that it had not

been left there to trap him.

By this time dusk had fallen. David drove up the long winding grade which led to the clearing on the hilltop. A quarter of a mile from his destination, he turned the car around so that it faced down hill, backed it into the underbrush alongside the road, and finished the journey on foot.

Scarcely knowing what to expect he crept to the edge of the forest and looked out upon the field. It was deserted. The sheriff's automobile and its six passengers had disappeared. So had Ruth and the crime crusher car. The only thing that remained to remind him of the exciting events which had happened there that afternoon was the faint, sweet smell of the sedative gas which was mingled vaguely with the pungent fragrance of pine needles.

Lonely and forlorn, he stood there in the sepulchral glow of the summer twilight. Sobbing softly to himself—for he was young and alone—he rocked his head back and forth. As if in sympathy, the treetops around him swaved and sighed mournfully.

#### CHAPTER VII

#### What Happened to Ruth

SHAKING himself free from his spell of melancholy. David walked back to his car and drove to the highway. At the first service station he stopped and called the Logan number on the phone. As he expected, he was told that Ruth was not at home. Twice again at ten minute intervals, he phoned, with the same result. Finally, at about eight o'clock, he heard over the phone the greeting he had been waiting for: "Good evening, this is Ruth Logan speaking." In a voice that was as cold as dry ice, David said,

"Good evening, Miss Logan, this is David Smith."

"Oh, David!" Her voice seemed to quiver joyfully. "Thank Heavens you—"

"Pardon me, please for interrupting. I merely called to say goodbye to you and to tell you that you have accomplished your purpose. At last I am forced to admit that I am licked. Goodbye."

He was about to hang up but even with the receiver more than a foot away from his ear he heard her appealing cry, "David! Please!"

"I suppose you are going to tell me that you can explain everything," was his bitter response.

"Of course I can explain everything. But I don't think we had better discuss it over the phone. One thing I will tell you though. I know you are anxious about it. Your invention is safe."

"Safe?" He laughed without mirth. "You expect me to believe that?"

"You must believe me. Listen, David. I've just got to see you. Won't you meet me somewhere right now?" "All right," he said. "After all, I guess it doesn't

matter much what happens to me now."

"Where do you want me to meet you? Name any place."

"You'd better decide that. I may be overheard,"

He named a place about five blocks from her home. "Come on foot," he cautioned her. "And don't leave your house until eight-thirty."

She had hardly stepped outside her door when Smith's green roadster made its appearance.

"Ruth Logan!" David called to her. "Hop in here!
Ouick!"

Following a zig-zag course along unfrequented side streets, he finally parked in front of a vacant corner lot which gave him a clear view for several yards in all directions.

"Well?" he questioned.

"You don't trust me do you?" she said reproachfully. "I'm here, am I not-ready to listen to you."

"Don't you think we had better go and get your crime crusher?"

"Please tell me first why you didn't keep our appointment."

"If I had, the crime crusher would now be in the hands of the police. Perhaps you, too, would have been apprehended."

"What makes you think so."

#### Ruth's Story of the Saving of the Crime Crusher

"T ET me tell you what happened. After you left in the helicopter I took the wheel of the crime crusher car. I had hardly started the motor when one of the officers woke up and shouted for me to stop. He must have gotten a smaller dose of the sedative than the rest of them. Naturally I stepped on the gas and tore down the grade as fast as I dared to. He followed me in the sheriff's car. When I hit the highway he was right behind me. I had a merry time shaking him off. Several times I missed crashing by inches. Luckily his siren cleared the way for both of us. Finally he overtook me. He tried to force me off the road but I fooled him by stepping hard on the brakes. He swung in ahead of me. Before he could stop we came to a place where a narrow dirt road intersected the boulevard. I took a chance and swung into it. Luck was with me again. It might have been a blind alley leading to some farmhouse but it turned out to be a through road. It brought me out to National Boulevard. I doubled back and headed toward town. Evidently I fooled him because I saw nothing more of his car."

"Then what happened?" David demanded.

"I didn't dare to drive to the place where you asked me to meet you."

"Why?"

"I couldn't be certain that I had eluded the officer. If he was still chasing me, I didn't want to lead him to you. Also I was afraid they would have the radio police cars hunting for me on Roosevelt Boulevard and National Boulevard, so I hit for town as fast as I could. I figured I would have a better chance of

hiding the car in a side street in the city, than out on one of the main traveled highways."

"And what did you finally do with my car?"

"I drove it into a garage."

"A garage?"

"Yes. A public garage not far from where I live. It is a place that caters to the apartment trade you know. I'm sure they didn't suspect anything."

"Is it there now?"

"Of course."

"And no one else knows about it?"

"Certainly not."

There was an awkward pause.

Ruth spoke: "Aren't you sorry you talked so mean to me?"

"Yes. I am sorry—dreadfully sorry. Again'I must ask you to forgive me."

"Oh, that's O. K. Shall we go and get the crime crusher—or are you still afraid I am leading you into a trap?"

"I said I was sorry," David reminded her. "Please don't be too harsh with me. I've suffered enough already," he added with a grin.

#### The Crime Crusher Saved by Ruth

ON the way to the garage, Ruth continued her narration:

"I have some more good news for you. After I parked the crime crusher I called home. Mother was out so I phoned Dad at his office. He invited me to have dinner downtown with him. That gave me a chance to have a heart-to-heart talk with him. I told him about seeing the crime crusher in actual operation." "But he didn't believe you," David surmised.

"On the contrary—I am sure I convinced him. Dad

knows me well enough to believe me when I assure him on my honor that I am telling the truth."

"What did he say about the crime crusher?"

"He wants to see it himself."

"Oh. He wants to see it himself, does he? What did you tell him, please?"
"I told him I would try and arrange it."

"But-"

"I know what you are thinking," she cut in. "You are afraid of another plot to arrest you and destroy your invention."

"Can you blame me for thinking that?"

"Perhaps not. But Dad has had a change of heart."
"Interesting, but lacking in verisimilitude. The leopard does not change his spots over night."

"Oh I know you don't think much of Father-per-

haps with good reason."
"I'll say I have good reason for my opinion of him.

Because he is your father I try to give him the benefit of any doubt that may exist. Unfortunately there doesn't seem to be any room for doubt."

"Nevertheless I know it will be perfectly safe for

you to demonstrate your invention to Dad."

"And get shot or thrown into jail again?"

#### Logan Is to See the Crime Crusher

"YOU needn't be afraid of that. I know my father better than you do. In all my life I have never known him to break a promise. This evening I made him promise solemnly that if I could persuade you to demonstrate the crime crusher he would not attempt to harm you or to interfere with your liberty in any way, shape or form. He really has changed, I tell you. This is a wonderful chance to get Dad to cooperate with you in your great work. What do you say?"

David didn't answer immediately. He was thinking hard. Finally, he said, "Ruth, I am at a loss to account for the influence you have on me. You certainly have persuasive ways. I really think that if you assured me that milk is black I would have to believe you."

"Does that mean you will consent to show the crime crusher to father?"

"I'm afraid it does-even against my better judgment."

"Can you make it tomorrow morning? Dad doesn't go to the office on Saturdays, you know. He usually plays golf in the afternoon, but he will be at liberty in the morning."

When they reached the garage where the crime crusher was stored, the man on duty demanded a claim-check before he would allow the car to be removed. Apologetically he explained that the owner of the garage had recently been forced to pay a large sum for a car which had been released to a man who turned out to be a thief. "Not that I think you are thieves," he added. "But the boss gave orders not to release any car without a claim-check and orders is orders." Ruth didn't remember what she had done with the

laim-check.

"Suppose we can't find the check," David asked.
"How can we prove ownership to the car."
"Have you your original, duplicate registration

certificate?"

"Yes. But it is in my safety deposit box. I can't get it until to-morrow morning."

"I'm sorry, but--" The garage attendant left his sentence hanging in midair.

"After all, it really doesn't matter," David said. "I shan't need this car until to-morrow morning anyway. I may as well leave it here all night."

#### CHAPTER VIII

#### The Crime Crusher Solves a Mystery

A soon as the bank was open on the following morning, David went to his safe deposit vault and procured the original registration certificate which proved his ownership in the crime crusher car. Arriving at the garage, he half expected to learn that his invention had already been removed, but it was still there.

In accordance with his agreement with Ruth he drove direct to the Logan residence. Much to his surprise the door was opened by Thomas Logan himself.

"Good morning, Mr. Logan," David stammered.

"May I see Miss Ruth?"

"She's not here," was her father's blunt reply. Then, in a vice which was a trifle less hostile he added, "She has gone for a horseback ride in Lincoln Park. Ruth is taking riding lessons. She never lets anything interfere with her Saturday morning rides."

"Did she tell you-" David started to say,

"Yes. She told me. I may as well make my position clear to you at the outset, young man. I haven't backed down an inch in my opinions about you and that crazy invention of yours. But last night my daughter hypnotized me into making a promise. Whatever you may think of me, you must grant that I have an unbroken record for keeping my promises."

"I hope so, Mr. Logan," said David. "Are you ready for the demonstration?"

Logan answered in the affirmative.

#### A Chance for a Demonstration of the Crime Crusher

PERHAPS my invention can be of some practical assistance to you," the young man suggested. "Isn't there some mystery you are working on now—something that you would like to have cleared up in a hurry?"

"Yes, there is," Logan informed him. "Do you re-

call the Matoon blackmailing case?"

"I remember reading about it in the newspapers. But there is no mystery about that. Your men caught Matoon red handed with fifty thousand dollars in marked bills in his pockets. As I remember it he was convicted over a month ago. There was one case in which your department worked very efficiently."

"Thank you," said Logan in an ironical tone. "The thing that concerns me now is not the Matoon case itself, but is an unpleasant sequel. Can I rely on you

to keep a secret?"

"Absolutely!" David assured him. "My reputation for keeping secrets is like yours for keeping promises."

"All right. I'll take your word for it. You know, of course, that, when the money was taken from Matoon, it was not returned to the victim, Albert Crandall. That was because we needed the marked bills as evidence in order to convict Matoon. After the trial the cash was placed in a sealed envelope and was turned over to a certain official, whom I need not name, for safe keeping."

"Why wasn't the money returned to Crandall as soon as Matoon was convicted?" David wanted to know.

"Because Matoon's lawyers immediately made a motion for a new trial. You understand that in case of further legal proceedings the money would still be needed as evidence."

"I see,"

"But Matoon failed to get the new trial. Finally he

quit stalling and decided to take his medicine. The matter was definitely settled about two weeks ago. Naturally Crandall then demanded the return of his fifty thousand dollars."

"Naturally."

"But when the official I mentioned before opened the envelope he found that it contained nothing but a bundle of paper."

"I see. And you want to find out who stole the

money?"

"Exactly."

"Have you any idea where the actual theft occurred?"

"It must have happened inside the vault."

"Are you sure the money was in the envelope when it was handed over to this official?"

"Certainly. The money was placed in the envelope by me, personally. I myself sealed it and handed it over to the official I mentioned a while ago."

"Were there any witnesses?"

"No. That's the trouble. MacDonald—I mean the official—had the nerve to insinuate that I stole the money. Can you imagine that?"

"Yes, indeed. I can easily imagine that."

#### A Bit of Sarcasm on David's Part

I GNORING David's sarcasm, Logan went on. "Under the circumstances I am not in a position to accuse anybody else of stealing the money. I'm on the spot myself, you see."

"So I perceive," was David's comment. "Did anyone else have access to the vault besides Mr. Mac-Donald?"

"Yes. Two other men had the combination. Both of them have been trusted employees of the county for many years. I would hate to accuse either of them unless I had positive evidence to support the accusation."

"And suppose I can get that evidence for you? Suppose I can put my finger on the culprit and can get an actual photograph of him in the act of stealing the money. How would that appeal to you?"

"If you could do that you certainly would take a lot of grief off my shoulders. Unfortunately it is impossible. Miracles don't happen nowadays."

"Yes they do," David contradicted him. "With my crime crusher, catching the thief is not only possible but absolutely certain."

As they drove toward the business section of the city, Logan asked, "Are you sure you can make this contraption of yours work inside a vault? I don't think there will be room for all this equipment."

"It won't even be necessary to take the crime crusher out of the car," David told him. "That is, providing I can park within a few feet of the building."

"Do you mean to tell me you can make it work right through the walls of the vault?"

"Certainly. You see, my crime crusher operates in hyperspace."

"In what?"

"In the fourth dimension. It won't be necessary for me to explain the principle in detail. Perhaps it will suffice if I say that to the hyper-lenses and hyperprisms of my invention all the rooms in a building look like pigeon holes. They are wide open in the direction of the fourth dimension. It is an easy matter for the crime crusher to look inside any of them and see what's going on there."

Following Logan's instructions, David drove into the alley adjacent to the building, parking the car as close as possible to the room in which the vault was located.

For over half an hour he made calculations and manipulated the controls of the machine without accomplishing anything significant.

Logan made several sarcastic remarks which David did not take the trouble to answer. Finally the image on the view finder showed what looked like the interior of a large bank vault.

"Is that it?" David asked.

"It looks something like it. But where is the thief."
"We may have to do a lot of fishing before we catch
him," David explained. "If you know the exact date,
hour and minute when he did it, I could locate him
at once."

David continued to work the dials and switches and levers. After another long interval the door of the vault opened and in stepped a man.

vault opened and in stepped a man.
"Johnson!" the attorney exclaimed. "Surely it

couldn't be-"
"Wait," Smith ordered. "Let us see what he does."

#### The Vision on the Crime Crusher's Screen

THE man whom Logan had called Johnson tugged at the heavy door until it was nearly closed. Then he produced a key with which he opened one of the steel doors. Removing the metal box he fumbled around among the contents, finally producing a long, fat yellow envelope.

"That's the money," Logan whispered.

David had already reached behind him and had snapped on an electric switch. Something in the car began to click.

"What's that?" Logan asked in a low tone.

"A movie camera. We are now making a screen test of your friend. And by the way, Mr. Logan, you don't need to whisper. Johnson can't hear you."

Despite Smith's suggestion, Logan almost held his breath as he saw the man in the viewfinder carefully pry open the envelope with a small round object. As he removed the banknotes, David picked up a rubber bulb and pressed it.

"I just snapped a still picture of him," he explained. Removing from his pocket a bundle of papers similar in size to the stack of bills, Johnson placed it inside the envelope. Sealing it, he returned it to the metal box and locked the door of the compartment. Then he departed as stealthily as he had entered.

"Well," said David as he turned off the device.

"What do you think of it?"

"Marvelous," Logan was forced to admit. "Are you sure you got a good photographic record of what I just saw?"

"No question about it. I'll have the films developed right away. The prints will be ready Monday morning if you want them."

"That will be fine. In the meantime, perhaps I had better run inside and arrange to have a couple of my investigators keep a watch on Johnson, so he won't have a chance to abscord with the money."

"Do you want me to wait for you?" David asked politely.

"If you don't mind. I'll have to return home and I hate to ride in busses or taxicabs."

When Logan returned a few minutes later his face was so haggard that David exclaimed, "Why, Mr. Logan! What's the matter? Are you ill?"

"No, I'm not ill. But I have just heard some terrible news. Ruth has been kidnapped!"

#### CHAPTER IX

#### Ruth in Peril

N the way back to his home, Logan gave David what little information he had about the kidnapping of his daughter.

"You must keep this absolutely under cover," he cautioned David. "Ruth's life depends on keeping the whole thing a secret. I haven't told any of my own investigators about it."

"How did you find it out?"

"From my wife. She didn't have the slightest idea I would go to my office this morning, but she just took a desperate chance and phoned there, leaving word for me to call her if I did come in."

"What did she tell you?"

"She got the news from Ruth's teacher. He was riding with her along one of the bridal trails in Lincoln Park. Three masked men armed with revolvers held them up and made them dismount. The horses were driven off. They trotted back to the stable. Watkins, the riding master, told my wife that two of the crooks dragged Ruth to a closed car which was parked a few yards away from the trail on a narrow dirt road. He didn't get a good look at the automobile. The third man ordered Watkins to walk back to the stable. He warned him not to tell anyone what had happened. Ruth's life depends on keeping the matter out of the hands of the police, he said. Watkins got to a phone and called my home. He begged my wife not to notify the police. He seemed convinced that the crooks meant what they said when they threatened to kill Ruth if the newspapers got hold of the story."

"What do you suppose they are after?" David questioned.

"I don't know. Money perhaps. But they must know I am not a wealthy man.

"I have a hunch that it is the Vanido gang-the same

ones that kidnapped little Jimmy Ferguson."
"But the two kidnappers—the ones they call Pop-Eye

"But the two kidnappers—the ones they call Pop-Lye and Hugo—they are in jail are they not? I ought to know. They tried to beat me up, while I myself was a

guest of the county."

"Pop-Eye and Hugo are nothing but underlings. They were merely hired to guard Jimmy. The real brains of the gang is Vanido, but he is mighty careful not to get caught himself. On the other hand, to save his face with the rest of his gang, he is obliged to look after those who do his dirty work—like Brown and Viconi. That's probably his real reason for kidnapping Ruth."

"You mean that he is using her as-"

"As a lostage—yes. I have received several threats both over the phone and in the mail. They all demanded that I get Brown and Niconi out of jail and threatened to harm my family if I didn't obey. I thought they were just bluffing and I didn't pay much attention to them."

"Has Mrs. Logan heard from the kidnappers yet?"
"No. They told Watkins that they would call me on
the phone at two o'clock this afternoon and that I had

better be there to answer it."

David looked at his watch. "It's twelve ten now," he announced.

"Yes. Won't you have lunch with me?"

"Thank you, but I really don't feel like eating anything."

"Neither do I, Ruth—" He could go no farther. When they reached their destination, Logan said, "Won't you please come in and wait with me, anyway."

#### The Change in Thomas Logan's Manner

S URPRISED at the change which sorrow and auxiety had wrought in this man who previously find been so discourteous to him, David said, "Why of course, Mr. Logan. Please don't worry about Ruth. Remember we still have the crime crushet."

They entered the house.

Smith felt uneasy and embarrassed as Logan tried to calm and comfort his wife, who was hysterical with worry. It seemed centuries before the phone rang, When it did, all three of them jumped as if they had been shot.

From the half of the conversation which David could hear, he knew that Logan was striving hard to stall and to placate the other man without making any definite promises to him.

"Don't you understand?" he shouted into the phone.
"I can't get Brown and Viconi out of jail without a
court order. All the judges are out of town for the
week end. I can't get in touch with them until Monday morning."

Sweat was dripping from his forehead when he final-

ly hung up the receiver.

"They gave me until Monday noon," he said in a hollow voice.

"Will you excuse me now?" David asked. "Certainly. But where are you going?"

"I'm going to hunt for Ruth."

"Will you allow me to come with you?"

"Gladly."

Logan surprised him by asking, "Have you got a

gun?"
"No. I never owned one."

"Not knowing what we may get into," Logan said, "I think'll I'll pack my automatic along anyway."

#### The Crime Crusher to Find Ruth Logan

ThTERING the crime crusher car, they drove to the riding academy near Lincoln Park. In response to Logan's request, Watkins gladly directed them to the spot where he and Ruth had first been accosted by the kidnappers.

Smith turned on the crime crusher. Followed several hours of calculating, adjusting and nerve-racking waiting. Late in the afternoon, success crowned his efforts and the scene, which Watkins had described,

was reenacted on the screen.

They had no difficulty in keeping the kidnapper's car in focus as they followed it along the narrow, dirt road to the main highway. About fifteen miles from the park the car turned off the boulevard and followed a private road which led to a small, shabby farm house. It stopped and three men leaped out of it, dragging Ruth between them.

"I wonder if they are still there," Logan thought out loud.

"There's the answer," said David, pointing to a green sedan which was identical with the one visible in the view finder. It was parked near the rear door of the farm house.

"Why don't you stop?" Logan asked.

"Do you think that is advisable?" David countered.

"If I stop here some one in the house is certain to see us. If we are going to call on them we had better make it a surprise."

"Guess you are right," Logan admitted.

Smith drove until he felt sure that the car could not be seen from the farm house. Then he pulled off to the side of the road and parked the car.

Logan got out. "You'd better stay here," he suggested. "It's up to you to guard the crime crusher."

"What are you going to do?"

"I'm going to sneak through this peach orchard. It ought not to be hard for me to reach the back door of that house without being seen."

"And when you get there?"

#### Logan Shows Courage at Last

LOGAN patted the bulge in his coat pocket which David knew was caused by the heavy automatic pistol.

"I'm coming with you," David declared.

"No. I really think you will do more good if you

stay here. If I don't come back in a reasonable time, go to the nearest phone and call the police. Even if they get me, there will still be a chance of saving Ruth."

David couldn't help but admire Logan's courage as he stole through the orchard knowing in all probability that he had at least three desperate criminals to deal with.

For twenty long, almost endless minutes David waited there anxiously. Then he slipped out of the car and ran through the orchard. When he came insight of the house he proceeded more cautiously, covering the last hundred feet on his hands and knees in order to take advantage of the scanty cover offered by a patch of straggly weeds.

He crept to the house and cautiously peered through a window. What he saw made his spine tingle. In the middle of the room Logan was standing, automatic in hand. Opposite him were two ugly looking characters, their hands stretched toward the ceiling. Through the door, which was just behind Logan, David saw a third man stealing toward him on tiptoes. In his hand was a wooden club about the size of a base-ball bat. It was apparent that Logan was unaware of the danger that was approaching him from the rear.

David picked up a stone and hurled it through the window pane. The crash of splintering glass startled all four of the men inside the room. The one with the club stopped, his weapon poised in midair. Logan allowed his gaze to shift for just an instant and one of the kidnappers took advantage of this opportunity to snatch a revolver which was lying on the table and to dodge behind an overstuffed chair. Peeking over the top of the chair, he took careful aim at Logan.

At this point Davis reached in his pocket and drew forth a round object about the size of a tennis ball. He hurled it into the room. It struck the man with the revolver square on the forehead and burst, deluging the crook in a cloud of bluish vapor. There was a loud report but the bullet intended for Logan knocked up a shower of plaster from the ceiling.

In rapid succession, David tossed two more bombs into the room. All the occupants, including Logan, sank to the floor unconscious.

#### Ruth Is Found by David

D AVID ran to the door and entered the cottage. His first thought was for Ruth. He found her in a room on the second floor. Around her waist was a thick leather belt which was fastened with a padlock and was chaimed to the iron bedstead. David released her by slitting the belt with his jack-knife.

As soon as she was free to move, she threw her arms around David's neck. 'His lips found hers. Much to his own surprise he found himself murmuring, "Ruth, my darling! I love you!"

Between them, they carried the three sleeping crooks to the kidnapper's car, dropped them in a heap on the back seat. Logan was also unconscious. They propped him up on the front seat. Commandeering the auto-

mobile, David drove back to the city. Ruth followed him in the crime crusher car.

They located a police station where they got rid of the three sleeping crooks and their machine. Logan, still sleeping soundly was transferred to the crime crusher car.

Joy reigned supreme in the Logan home that evening. Mrs. Logan insisted that David must stay for dinner and he glady consented. Ruth's father awoke from his nap in time to join in the festivities.

When the time came for David to leave, Ruth went to him and without the least display of embarrassment kissed him full on the mouth right in front of her two parents.

Her father glanced at his wife, shrugged his shoulders and remarked, "So that's how things stand now, is it?"

"Yes, Dad," Ruth said calmly. "That's exactly how things stand."

To David her father said, "Young man, I wonder if you could come down to my office Monday morning. I have a lot of things I'd like to talk over with you."

"Gladly," said David.

As he stepped forth into the balmy, moonlit night he felt as if he was walking on air, accompanied by sweet music and fragrant perfumes.

#### CHAPTER X

#### Justice Triumphs

N Monday morning, when David entered Logan's office, his first words were, "Good morning, Mr. Logan. Did you get the photograph and the motion picture film of Johnson? I ordered them delivered to you here."

"They arrived early this morning. Thank you very much. I just had Johnson in here. All I did was show him the still photograph. I didn't even have to use the motion picture film. He broke down and confessed. I told him I wouldn't prosecute him if he would return all the money. Some of it has already been spent, but his wife's folks have money and Johnson thinks he can get them to make up the deficiency. That lets me out of a tight place. I want you to know that I appreciate your part in it."

"Oh, that's all right Mr. Logan."

Ruth's father continued, "I also owe you an apology. Please try to overlook and forget the things I said and did to you before I understood you fully."

"Don't say anything more about it," David said awkwardly. "I'm the one that should apologize. My conduct was not exactly tactful."

#### Straightening Up the Lines of Justice

"PERHAPS not. But everything you have said to in me was absolutely right. I asked you to come here because I want to tell you this: I have decided to take your suggestions. I have already returned the money which I—well, let us say, which I borrowed from Montgomery. When I accepted that money from his representative, I promised nothing. Consequently I am now free to prosecute him in dead earnest. With the help of the evidence you have already obtained with your crime crusher, it ought to be easy to convict him. I shall also ask for dismissal of the case against Marvin Williams. Crowder will be indicted and convicted of the crime for which he tried to frame Williams. Have you any other recommendations to make?"

"Yes. When I was in jail I met a little Filipino boy. He is a prize fighter. They call him Speedy. Do you know anything about him?"

"You mean Armado?"

"That sounds like it—Speedy Armado. What is he in iail for?"

"Drunk driving. He is serving a sentence of six months."

"Is there any chance of getting him off by paying a fine?"

"Perhaps it can be arranged. Why?"

"If you can manage it, I want to pay Speedy's fine. He did a good turn for me and I'd like to do something for him."

"I'll see what can be done. Is that all?"

"Just one thing more. Perhaps you will recall that first day I came in this office, your daughter Ruth came in here and introduced herself to me. After she left you informed me that she was engaged to be married to a prominent business man." Logan grinned. "Perhaps I was stretching the truth a bit. I should have said that she was *practically* engaged. But after you appeared on the scene she gave the other chap the air."

"That's good news, Mr. Logan. But I can't help feeling sorry for the other fellow."

"Suppose we change the subject. About your crime crusher: I want you to know that I am now thoroughly sold on it. I think it is the greatest invention the world has ever seen. With your permission, I shall be glad to use it in this county. If there is anything I can do to help you introduce it in other places, please feel free to call on me."

"Thank you, Mr. Logan. That means a great deal to me."

"And, by the way, David."

"Yes?"

"You haven't said anything to Ruth about that money I borrowed from Montgomery have you?"

"Of course not. I haven't mentioned it to anybody. And I have already destroyed the films I took of you."

"And what about the future? Will you promise never to mention it to Ruth?"

Holding his right hand on high David declared, "I shall never mention it to a living soul—least of all to Ruth."

Logan placed his hands affectionately on the young man's shoulders. For a while he looked searchingly into David's smiling face.

Then he said, "Well, I guess you won't be such a bad son-in-law after all."

THE END

#### NOTICE

A. Merritt, who is well known to many of the readers of Amazing Stories, has called our attention to by similarities in descriptions, characterization and situations in the story "Beyond the Veil of Time," by B. H Barney, published in Fall-Winter issue of Amazine Stories Quarterly, and descriptions, characterization and situations in two of his books, "The Moon Pool" and "The Face in the Abyss."

Mr. Merritt objects particularly to the utilization of the conception and name of "The Dream Makers," which formed an essential part of his "Face in the Abyss."

#### What Do You Know?

READERS of AMAZING STORIES have frequently commented upon the fact that there is more actual knowledge to be gained through reading its pages than from many a text-book. Moreover, most of the stories are written in a popular vein, making it possible for anyone to grasp important facts.

The questions which we give below are all answered on the pages as listed at the end of the questions. Please set you can answer the questions without looking for the answer, and see how well you check up on your general knowledge of science.

- 1. What feeds the oil or melted grease to the flame of a lamp or candle? (See page 199.)
- What is the action of the flint, steel and tinder in producing fire? (See page 199.)
- What is a soap bubble? (See page 200.)
   What connection is there between film action and the
- oil or melted grease in a wick? (See page 200.)

  5. If a dry rope is wet with water what happens? (See
- page 200.)
  6. What was Argand's invention? (See page 200.)
- 7. What was the nature of the pilum, a weapon carried by the Roman soldier? (See page 214.)
- What can be termed "an inaudible sound?" (See page 225.)
- Can any theory, formulated on the anatomy of the brain, be given to account for man's low intelligence? (See page 233.)
- 10. What functions and activities can be attributed to the soul? (See page 235.)
- What is one of the things the Indian animal, the Mongoose, can do? (See page 252.)
- What is the name of the chemical producing 'twilight sleep'? (See page 268.)

### <del>ISC</del>USSIONS

In this department we shall discuss, every month, toples of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine. In case a special personal answer is required, a nominal fee of 20c to cover time and postage is required.

Notes on Stories-Sequels Wanted-The Speed of Electricity

Editor, AMAZING STORIES:

This is my first try at your "Discussions Department," and I hope this letter will be published. In your January issue of A. S. "The Pool Of Death," was about your best story; the others that were good were, according to order: "The Treasure Of The Golden God," "The Last Earl," "Omega The Man," "Delilah" and "Radicalite."

Bob Olsen's scientific detective stories appeal to me, and I hope he keeps them

up Of all the scientific mags on the market yours tops them all (I ought to know I've read it for five years).

The present cover is far more futuristic looking than the old one; keep it up. Please try to give sequels to, "The Stone From The Green Star," "Tumi-thak Of The Corridors," and "Power."

There is one question I would like to ask you and that is, what is the fastest: light or electricity; and the relative speed of each?

Ben Warner, 4334 Highland Ave. Kansas City, Mo.

(Tumithak, you will find reappearing in AMAZING STORIES. It is not easy to assign a definite speed to electricity-did it ever occur to you that the word electricity properly speaking cannot be de-fined? Light has the highest speed of anything we know of .- EDITOR.)

A Letter from an Appreciative Reader

Editor, AMAZING STORIES: I have been a consistent reader of your instructive and entertaining publication for four years or more. This is consequently my first contribution to the discussion columns, for which privilege I thank you. It is not my intention or purpose to launch forth upon a caustic or destructive criticism of your excellent magazine, but rather to encourage and praise your authors and artists. Of course they do not all have the same ranking, that is, in my estimation. Nevertheless. all have contributed meritoriously to A S. from time to time and collectively I dare say they are the best staff of writers possessed by any magazine dealing in this type of fiction. Myself, being an artist, I keenly appreciate the efforts of Morey, Wesso and Sigmond, although I consider Paul the peer of them all. The change of cover I think is an improvement over the previous types, though I still believe your artists have but barely tapped this new field of illustration. However, keep up the good work.

I am aware that it is rather amusing and puerile to attempt to list your authors in their order of superiority or excellence, but to make an exception of a rule, I shall endeavor to do so, sketchily, of course.

Those authors whose efforts have been consistently good and who have occasionally risen to high peaks of excellence are, A. Hyatt Verrill, J. W. Campbell, Jr., Dr. David H. Keller, Dr. Miles J. Breuer, Dr. Wm. Lemkin, Harl Vincent and Jack Williamson, also Captain S. P. Meek.

There is one writer whose works have been a great source of pleasure and for whom I hold the profoundest respect and admiration although he is not included in your present staff of authors. He is Clark Ashton Smith. His addition would round out an already fine corps of

It is with pleasure and gratitude that I note the diminishing of a tendency among certain of your authors to endow lowly forms of organisms such as the crab, alligator, spider, turtle, etc., with human and even superhuman intelligence, reasoning powers and abilities.

It also has been a constant source of intermittent amusement and irritation to me, as I have observed the almost universal desire among writers of science fiction to quit the confines of good old "terra firma" or earth and go roaming through space with their characters, Please Mr. Editor, cannot you hold them down to earth a little? I dare say that the planet earth has not been exhausted as a setting or background for some good science fiction stories. Not that I dislike interplanetary stories, but because it is in my opinion very difficult to write a truly great interplanetary story. It takes more brains, skill, knowledge and imagination than most authors realize. For that reason I enjoy and appreciate such authors as A. Hyatt Verrill, Drs. Keller, Breuer and Lemkin and Captain S. P. Meek. He whom I consider a worthy exponent of interplanetary stories is John W. Camp-bell, Jr., also Clark Ashton Smith. One or two others have also contributed creditably good interplanetary stories such as Williamson's "Stone from the Green Star."

In conclusion I would like to say that I thoroughly enjoy the Editorials and the Discussions columns and am grateful for the many happy hours of entertainment A. S. has provided me.

S. Pisciotta, 901 Washington Ave., New Orleans, La.

(We have to yield of course to our

author's ideas as we are not personally supplying the stories, but as a matter of criticism we entirely agree with what you say about endowing animals and insects with human intelligence and reasoning powers. But the ant stories of which we have given a number seem to form an exception to this rule and certainly some of them have been extremely good and picturesque and they are based on the high intelligence of the insect. It is interesting to note that the ant has been used in stories by excellent authors, and seem to fit in better than other beings. What you say about interplanetary stories, certainly fills the bill. You will notice the successful ones that we have published have been by very good authors and we know one thing definitely-such stories are very popular with our readers. We now have a story in our files written by your favorite author, Clark Ashton Smith, which we hope to publish in the near future.—Editor.)

AMAZING STORIBS in Iceland Editor, AMAZING STORIES:

After six years of reading your maga-zine, I can only say that I have never regretted the money spent which amounts roughly to about £4. Each copy goes to a friend of mine who lives on the Trondhjem Fjord, Norway. Lately, she has taken to sending it to a village in Iceland, where it is esteemed highly and read until it falls to pieces. At the village's request my friend sends me on their message (translated literally).

"The Western Land of United America is to be bowed to for bringing forth such albatross-visioned stories with such reallike swiftness of telling. We are with debt to her and to the book you send."

My friend Glora writes "Skall to you. AMAZING STORIES. May the darkness of depression of other magazines be unnoticed by you living in the full radiance of a Midnight Sun. My household and I especially like "Skylark" and its sequel. Also many others. We say "Thank you."
I polish up my Norwegian wonderfully

in the monthly letter to Glora. All the tricky bits and especially the slang-a lot of which I don't know myself-I have to translate and paraphrase. Her job is to paraphrase my paraphrase which must be terrible work, as most of the Icelanders have never seen an airplane. One of her efforts was great, you will admit-"Great big tank with a sort of geyser-gas that lifts it as high and higher than Hekla. Inside it men can sit and work although the machine is as quick as a star-twinkle.

It says a good deal for the efforts of Glora and I doubt that the Icelanders have a glimmering of a notion what it is all about. But the worst is over as they have a schoolmaster who can read and write English now. He sent Glora a priceless drawing of an American airman which the village artist had drawn from information gleaned.

I am sure you will not think this a liberty for all of us to write like this, but we do it out of gratitude and admiration for your glorious and, let us hope, sempiternal, magazine I close with Glora's forefuell.

Jeg er Dem meget taknemlig (I am greatly obliged to you) T. Mary Bosdet, 15 Carlton Mansions, Holmleigh Road, London N. 16, England.

(The proverb says, "Good wine needs no bush" and there is no need of the Editor printing anything but praise for this most delightful letter. The expression "Skall to you" means your Health or your Luck such as "Good luck to in English. If we mistake not, you will find the word "Skall" in one of Longfellow's poems about the old Scandinavian world. The writer has long been a devotee to the old Scandinavian classical Sagas and has entered a very little way into modern Icelandic. The wonderful little island of Iceland, with its population of about 100,000, has a complete modern literature of high merit. Our readers will readily understand that this letter comes very near to the heart of the writer of this comment and we are very proud to think that AMAZING STORIES is appreciated in Iceland and we will be delighted to hear from this writer again .-EDITOR.)

#### A Good-Natured Letter with a Bit of Criticism in It

Editor, AMAZING STORIES:

For some time I have been intending to write to you, to commend you for your good work in interesting the general public in science.

Since I bought my first copy of your magazine in April, 1926, I have bought every issue and also every issue of your competitors. I now possess forty-seven volumes of science fiction, making a total of 1,161 stories by 359 authors. Doubtless there are actually fewer authors than names, for some writers have more allases than crooks possess.

It always makes me laugh to read some letter in your publication telling which story is the best and so on. The story that will be remembered is the control of the story that will be remembered is the control of the story that will be remembered in the control of the story and it is best that they are. And alas for the shorter stories! If someone mentions the best he has read, it is never a short story, but always a serial. In this kind of writing, ways as resial. In this kind of writing, it is originally of thought and treatment that counts; and all the monsters of Venus and hyperspace will not save the story.

Take for instance a story in your first volume: "The Runaway Skyscraper" by Murray Leinster. No one who has read that has forgotten it. Another one, "On the Martian Way", a story in your second volume, written by H. G. Bishop. No other story has been published by him.

I am no critic, and many of the stories I like may be full of errors, but the high standard of stories in your magazine has never been lowered. Particularly the Quarterly. Every year there appears an outstanding story that will be remembered.

Take, for instance, "The Moon of Doom," "A Second Atlantis," "A New Republic," the "Solarite" series and others too numerous to mention. Each is unique, and each one masterfully done.

There is a story that never received its just due and that was "The Second Deluge" by Serviss. I will not mention the "Skylark" series by Smith, nor will I mention the three stories by Merritt that have appeared in your magazine. The "Skylark" series have been surpassed by the "Solarite" series, and Merritt's stories are always overpraised, owing to the excellence of his stories are

As for the discussion between Dr. Smith and Miss Robb, it is my belief that slang is the life blood of a language and too much grammatical rigidity appeared to the property of the property o

May I join in the chorus of commendation anent the new cover. It is dignified and symbolic; it removes AMAZING STORIES from the realm of cheap fiction. I venture to say that it will attract as

many purchasers as the old cover.

Keep up the good work. Do not lower the standard of your stories or the number of your pages and all of your old readers will continue to be readers.

Charles C. Fulton, San Dimas, Calif.

(This letter is interesting and well put. You may be sure that we have not the least idea of reducing the number of

least idea of reducing the number of our pages. We are making special efforts to retain the best authors for the magazine and see no reason why we should not succeed.

Serviss used to do a great deal of science writing, and some years ago he used to come in and see us. Now he is dead. It is interesting to read your comments on the stories given in our early issues. If you will run over the list of old and new stories and their authors you will find that we are quite up to the old standard. We are giving very few reprints; in the early years of our magazine we published a number. But we felt that they were not always successes. Jules Verne was not at all appreciated by our readers to the degree we looked for. We may yet find something of his to publish. We have started to give some short-short stories, and these operate to evolve absolutely contrary opinions from our readers. Those who condemn their shortness do not realize that there are few O. Henrys in the world of letters.-EDITOR.)

Copies of AMAZING STORIES for Sale

Editor, AMAZING STORIES:

I have just been reading the Discussions of the past few issues and note a demand for back issues. I have a complete set, including the Annual, which I have read through a number of times with a better understanding and appreciation each time.

Cration each time.

As there is such a demand for back numbers I'm willing to give someone else a chance to get some of the pleasure I have had. I am willing to sell the complete set. They are all as good as new, intact with all covers. I will let the complete set go for \$10,00 in wooden create ready for shipment, f. o, b.

Closing with many thanks and hoping AMAZING STORIES will continue to be as great a magazine of Science Fiction as it is now, I remain,

Leon Pedersen, 11 Parma Road, Island Park, L. I., N. Y.

(We publish with pleasure your note concerning the numbers of the magazine you have for sale and feel sure that our readers desiring back numbers will be very glad to communicate with you.— EDITOR.)

#### A Spirited Letter from One of the Fair Sex

Editor, AMAZING STORIES:

I have been reading AMAZING STORIES for several years, but being a timid soul, I did not venture to write in any letters. I am hoping this letter will be noticed.

First of all your cover is nice. The colors blend lovely together. I thought I had the wrong magazine when I first picked it up, but one glance at the pictures inside reassured me.

"Beyond the End of Space" by John W. Campbell, Jr., is dandy. I am waiting patiently for the rest of it.

"In the Scarlet Star" by Jack Williamson is very good also.

There is one thing wrong with your book, it isn't thick enough to suit me. And it seems so long to wait for the next issue.

I get a great kick out of it, when the Editor tells the brick-bat throwers where to get off. I hate anyone to accuse "our" magazine of having anything but the best stories and covers there are. a. I'm for you; it's the greatest magazine out. You may not always suit everyone,

I'm for you; it's the greatest magazine out. You may not always suit everyone, but as you say, you can't please everyone. I know, I tree Vide Calculate.

Mrs. Vida Schneider,
10 Parker Street,
Portchester, New York.

P.S.—If anyone should care to discuss A. S. with me, I shall answer all letters.

(We receive few letters from ladies and we think that this very spirited production will affect our readers as it has affected us. It will be a case of Oliver Twist, "Asking for more." It is certainly an excellent production, even if we are afraid we do not merit such high commendation, And, like Oliver, we do hope for more. The magazine is a monthly, so there is no way of abbreviating the waiting for the next issue.-EDITOR.)

#### About the Spark Plug Error in the "World of the Living Dead"

Editor, AMAZING STORIES:

Personally, I am a fond believer of the old business proverb that "the customer is always right," and rarely take issue with the readers of my stories who, without doubt, are better qualified to criticize them than is the writer.

However, I feel that I must arise on this occasion and take brief issue with my generous constituents who have, although in excellent spirit, criticized my alleged error in the matter of the use of a spark-plug in the radio sequence of my humble story, "World of the Living Dead.

Frankly and honestly I have just concluded a good two hours' reading my carbon copy of the story and nowhere in it can I find evidence justifying the criticism. As a matter of fact, nowhere in my story do I mention spark-plug, although I do, and very correctly, mention

a spark-gap.

Now, writers are prone to make mistakes and linotype operators, printers and printers' devils are no exception to the proven rule that mistakes are apt to happen in the best regulated families. So to save my own scalp from further clubbing in the spark-plug matter, I find it necessary to divert the criticism to my friendliest of enemies, the linotype operator, his most devilish devil, or perhaps the esteemed proof-reader himself. I imagine that one or the other of them was thinking of his automobile, and a new set of spark-plugs, when he "did me dirt." Perhaps the culprit was setting his type and reading Barney Google at the same time. So from California comes an over-ripe grapefruit directed

Anyway, all is forgiven and I want to particularly thank my good friend, Charley Bradford of San Jose, California, for the nice things he wrote about "World of the Living Dead" and for taking my alleged error in such a kindly mood. I sincerely hope that he, as well as all other AMAZING STORIES readers. will be as lenient with the culprit who unwittingly of course, placed me in the spot-light of shame.

Yours for less mistakes by all of us1 Ed Earl Repp,

3046 Field Avenue, Los Angeles, California.

(Mr. Repp is quite justified in all that he says and he might very properly extend his remarks to include the unfortunate Editor whose attention the subject quite escaped. The story was very much liked by our readers, and it is a satisfaction to know that the author committed no "spark plug" error, but what can the poor editor say, who "missed out on it" in his editing the text? There is one comfort about errors. A person who never makes one is apt to be a bit prosaic; strlying hard in the direction of

literal exactness is highly to be commended. But there is danger of the effort in that direction interfering with the flow of imagination.-EDITOR.)

A Short Review of the April Number

Editor, AMAZING STORIES: Having just finished the April issue of AMAZING STORIES, I've summoned up enough courage to send in my opinion of

the stories and place them in the follow-

1 .- "When the Comet Returned"-Fine story-provides scope for imagina-

2.- "The Phantom of Terror"-Good

author, give us more of his stories.

3.—"Memory Stream" — Unscientific, but very interesting.

4 .- "Beyond the End of Space" Dragged in places, but not without merit. 5 .- "Universal Merry-Go-Round" -Provides food for thought, but rather im-

probable. 6.- "Authors Adventure" - Give us

more like it.

Congratulations on your new cover. It lends an air of dignity to "Our Mag." Sam Siskind.

475 Powell Street, Brooklyn, New York,

(This short letter is very much to the point and we are glad to see that you like the April issue as another one of our correspondents thought it was inferior. The one which you have put in the fourth place, "Beyond the End of Space" is by John W. Campbell, Jr., and he has proved to be one of the most appreciated of our authors and his readers constantly intimate that they would like more. The "Author's Adventure," that you express your approval of, is a typical "short, short" story and we can assure you that good short, short stories are rarities. We may inform you confidentially that a good many of our stories will be open to the criticism you apply to the fifth one. One is sometimes inclined to think that the improbable stories are the very best. We thank you for your appreciation of our efforts.-EDITOR.)

Constructive Criticism of the April Issue

Editor, AMAZING STORIES:

We have been reading your magazine for quite a long time and, sorry to say, cannot help but notice the decrease in the quality of the stories in "our" magazine.

Take the April issue for instance. None of the stories were very good except "Universal Merry-Go-Round" by Roger Bird and "Beyond the End of Space" John W. Campbell, Jr. The "Memory Stream" and "Ancients of Easter Island" were old hashed-over plots, stories similar to those having appeared a number of times in A. S. and other science fiction magazines, "When the Comet Returned" was fair, but contained too much of the occult and supernatural.

When is the long awaited sequel to the "Skylark" stories coming? You have promised this and having read the preceding "Skylark" storles we are anxiously awaiting lt.

We are curious as to what the April cover represents. The three preceding covers were very modernistic and aptly represented the progress of modern science

We hope that you accept our criticism as being constructive for we have the interests of A. S. at heart.

William Brickman, Julius Tralins, 2327 W. North Avenue, Baltimore, Maryland.

(We are putting this letter next to one also criticising the April issue, but the former expresses widely different views from those which you enunciate. As far as the "Skylark" stories are concerned. we are patiently waiting for Dr. Smith to carry out your wishes. It is entirely in his hands and we can do nothing to give him the requisite inspiration. think you will find that the new covers will stand various interpretations-they have as a rule been highly appreciated by our readers. We cannot please everyone.-EDITOR.)

#### The April Issue of AMAZING STORIES Is Again Exciting the Notice of One of Our

Editor, AMAZING STORIES:

Your April issue of AMAZING STORIES is not half as good as the previous one. Too many "Time" stories and hyper-dimensional themes. Please stick to reality and that part of the cosmos which can be sensed. The issue taught too little, and a superstitious air pervaded "When the Comet Returned." Did you print "Author's Adventure" to fill space? I read your mag, from its empryonic stage and hope it will arise from its present mired condition.

Floyd Anderson, 1651 N., Wisconsin St., Racine, Wisc.

(The best answer that we can give to your card is to say that if you will look through our letters, you will find that the April number, of which you complain, has been very well received. "Author's Adventure" of which you appear to complain, we thought was an excellent short-short story and many good critics have quite admired it. You speak about filling space. We are what the magazine Editor calls overstocked, which means that we have more than we can use in the way of manuscripts. We do not think our magazine is in any sense in a mired condition.-EDITOR.)

#### The New Covers-"Our Authors" Approved Of-Chemistry Stories Wanted

Editor, AMAZING STORIES:

I have read AMAZING STORIES for about five or six years and therefore feel qualified to write this, my first letter. In the first place keep up the new cover designs. They give the magazine "class." Then there's the question of the inside drawings. I'd eliminate these entirely and substitute a story instead.

As to authors, I prefer Capt. S. P.



If you have been wondering now to ma-some extra money here is your chance. The New Business Encyclopedia has 212 pages and over 400 money-making plans, ideas, etc. These are not get-rich-quick schemes but proven plans that have made money for oth-ers and will do the same for you. If you are proven plans that have made money for others and will do the same for you. It you are willing to work and want a steady income real money-maker. Start a business of your own with others working for you and be independent. Covers everything necessary in running a business. A real encyclopedia with \$2.00. forces. Sent post-paid on receipt of \$2.00.

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Meek, Jack Williamson, Harl Vincent, Bob Olsen; in fact all of your authors are good.

Why don't you print more stories on chemistry? Surely a great many readers are interested in this science. I know I'd rather read one of them for a change

instead of so many space stories. I see the April issue has eight stories and a long editorial. Keep it up.

Raymond Huber. 10540-90 Street, Ozone Park, N. Y.

(We have no idea of changing the type of our covers. The new covers have met with great appreciation and there is no danger of our giving them up. "Our Authors" we know are good, so good, that we sometimes are reluctant to use the work of a new writer, and of course it would be a great mistake to give way to any such feeling. We find that our old authors are very true to us and we really have to resist our personal inclination which is in the direction of giving more and more of their work in our pages. Chemistry, naturally, does not readily lend itself to sciencefiction narration and if you will run over the last issues of our magazine in your mind, you will find that there has been considerable chemistry in such stories as those of Bob Olsen's.—Editor.)

#### The New Cover Objected To-Comparative Merit Editor, AMAZING STORIES:

I have been reading AMAZING STORIES for two and one-half years now, but this is the first time I have ever joined the Discussions. After reading the December 1930 issue, I decided to write in, but I never could quite get up enough courage. The reason for this letter is the new cover. I agree with William Whyman, Jr., that "This guy Sigmond is no good." I guess he is a good artist, but he always gets something on the cover that has nothing to do with any of the stories, Anyhow, this new cover business will probably start a new verbal war and make the Discussions more interesting.

What I can't figure out is why some authors insist that rocket travel is impossible because (1) a rocket would be melted by friction, and (2) the shock of starting would kill the passengers. These can be answered easily. It seems to me that the driver could start at what speed he wished and would not have to go very fast until he got beyond the atmosphere,

The April issue of A. S. is good, but nothing like the wonderful issues of 1931 or the Spring and Summer issues of 1932. Please have John W. Campbell, Jr., write more stories like "Invaders from the Infinite," which was one of the few stories that rivaled "Spacehounds."

"The Memory Stream" could have quite a few sequels. In case the author wants to write some space-travel or super-invention stories he could use Atlantis or Lemuria.

Several people have asked for a sequel to "Tumithak of the Corridors" and "The Return of the Tripeds" and I would like to add my vote also. If you should think I have been too severe, you may console yourself by seeing that I still think that A. S. is worth subscribing to. By the way, how is E. E. Smith going to have his next story (if there is another) have a bigger war in it than Campbell's "Invaders from the Infinite"?

John A. Bauer, 2309 Calumet Avenue, Chicago, Ill.

(You do not need courage to write a communication to the Discussions columns. Your letter expresses definite views and that is what gives a letter value. Your letter is good, we hope we shall please you in giving it a place in this part of the magazine. A great deal has been said about the covers and nearly all the communications are from those who like them. The German engineers have been working very hard on rocket travel and certainly have had troubles of their own with them. The difficulties you mention would seem easy to overcome but there is certainly a strong suggestion of poor economy in rocket travel. "Tumithak," are glad to say, has at last got his sequel. We will see if we can do anything about the "Return of the Tripeds." It is gratifying to find that you consider AMAZING STORIES still worth subscribing to .-EDITOR.)

#### Short, Short Stories Asked For-An Appreciation Editor. AMAZING STORIES:

Just a brief note to second Forrest Ackerman's request in the April issue for more short-short stories in AMAZING Stories. Couldn't you run one of them every month or so? When well done, they're more effective than some of the longer yarns. I'd especially like to see something along a psychological linethere's nothing more fascinating than the workings of the human mind.

Let me add a word of approval for your new typographical make-up. This improvement, following the splendid cover change, leaves nothing to be desired. AMAZING STORIES is certainly at its peak now1

Carl Bourquin, 26 Gobel Place. New York City.

(We agree absolutely with what the writer of this letter says about short, short stories. Almost, without realizing it, we have drifted into giving a number of these in our magazine, but they are the hardest to get because everybody is not an O. Henry. It is easier to write a long story than a short, short one. The writer of this is personally responsible for the change in typography and makeup, so you can imagine how gratified he is with the statement in the second paragraph of your letter. AMAZING STORIES has no idea of joining in the projected flight over Mt. Everest but it hasn't the least idea of coming down from the peak which after much labor and thought it has attained .-- EDITOR.)

Our Magazine Is Not "Badly Managed" Editor, AMAZING STORIES:

For the sixth time in six weeks I have taken up my pen to write you. The point is, at present, will I finish this letter or will it follow the other



00 What Did You Dream?

DEPT. M-2

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Now to get down to business and tell you how to run your magazine. Generally, it isn't badly managed (not that I could do half as well myself), the only fault that I find in it is that it is difficult to obtain regularly each month here. I have to go to a different store each month, or at least very often. And besides having to walk all over Sydney, which, by the way, seems to become twice as big as it is, when you have tramped hurriedly through it. The magazine does not appear regularly, but comes out at different periods; from a fortnight to as long as six weeks often passes between the issues. But the darn thing was never meant for Australia in the first place. Now, about the stories. They're pretty

good mostly, but of course there are some poor ones as well, witness "The Doubt" (forget what issue that was in). "The Amir's Magic" (way back in March, 1932), and several others equally silly. Many stories have good plots, but a great many are just staid, slow old things which can be found in any "Western" mag. The author merely dumps the hero, villain and the fair young thing on Mars or Venus of the umpeenth dimension; then sails merrily along with a lot of Tom Mix tricks. And a lot of those varns of spaceships which conk out and land the crew or heroes on some sort of place are painfully reminiscent of "Robinson Crusoe" or the "Swiss Family Robinson."

The best S. F. story I have ever read appeared in the A. S. Quarterly some time ago-"The Blue Barbarians." It was my idea of the absolute apex of scientific fiction combining humor, science, excitement and everything else worth putting in a story. "Spacehounds of I. P. C." was exceedingly good, but the characters were too mawkish. Romance of Posi and Nega" was, as far as the science part of it went, perfect; the fiction in it was hard to find at all And "Suicide Durkee's Last Ride" was just the other way around. Professor Jameson's adventures as a metal man are pretty decent, and I hope we get some more soon.

The illustrations are just fair, but the illustrator himself is good. He gets the most stupid part of the story to illustrate. Does he pick his own parts to illustrate? If so, he is a poor judge. Look at the September issue! (I can imagine the Editor immediately rushing frantically about hunting for a copy of the September, 1932, issue-like me). All the illustrations except one feature human beings. And they aren't up to The one which shows only a much. space ship (only half of one at that) is by far the best in the book. As for the cover-but the Editor has doubtless long since swooned. Hurrahl

And don't say anything nasty or I'll write again 1

R. McNairn, 24 Cooper Street. Maroubra, Sydney, Australia.

(It is very easy to find fault, and in criticising our work our correspondents do not realize our position and what we have to consider in making up the magazine. It is not merely the question of filling up so many pages, but there is far more need of consideration and critical work by the Editors than a correspondent would be apt to realize. Although you seem to be very hard on us, your letter is so breezy that we shall hope to hear from you soon again. It is quite gratifying to us to get letters from readers in Australia and New Zealand, as it is a good gauge of the reception of the magazine by the public. You speak of "The fair young thing." One of our efforts is to keep "the fair young thing" out of our columns, but sometimes she fits in so well that we feel that it would injure the story if she were omitted. Write us again. Why do you not subscribe to the magazine and avoid wearing out your patience traveling through Sydney for it?-EDITOR.)

#### An English Reader Wants to Get Some Back Numbers of AMAZING STORIES Editor, AMAZING STORIES:

I notice in the November issue of "our Mag." two readers are offering very early numbers for sale. I am writing in an endeavor to secure some of these, but am afraid that, being so far away, someone else will get there before

I have been an enthusiastic reader of AMAZING STORIES since 1927, and my collection of these is one of my most valued possessions, but I am short of just seven numbers.

AMAZING STORIES is to-day, more than ever before, the premier science-fiction magazine. Having followed its fortunes almost from the start, from the days of "A Columbus of Space," "Station X" and the H. G. Wells reprints, it's great to think the good old mag. still stands for all that is best in science fictionlong may it continue to do so!

Here's some of the stories I liked best in the recent numbers:

"Power"-good. "Tumithak of the Corridors"-very good. "Troyana"-Boyoboyoboy, Capt. Meek at his best1 All Neil R. Jones' Jameson stories-excellent. "Mechanocracy"-Dr. Breuer as good as ever! "The Lost Machine"excellent. "The Metal Doom"-cleverly thought out and well written: 'sfunny how well the M.D.s write 'sfiction, "Politics"-one of Murray Leinster's best "Invaders from the Infinite"-the mind reels before John W. Campbell's terrific conceptions-a story that needed two readings to take it all in; science fiction plus! "The Ant with a Human Soul"-good stuff.

Mr. L. A. Kippin, Linota, Perceval Road. Romford, Essex, England.

(We publish your note of copies wanted and it seems impossible that you should not get the monthly issues. We would suppose that you would hear from some of our writers in these columns who have back numbers for sale. We have handed your list to our Subscription Department, who can supply at least a part of your requirements .-- EDITOR.)

N APPRECIATIVE READER HAS SOME ACK ISSUES FOR SALE AND HAS A SUGGESTION ABOUT THE COVERS

Editor, AMAZING STORIES:
This is the first time I have written to the Discussions Department. Ever since I read my first Amazing Story about a year and a half ago, I have been gathering the back is-sues and in a few weeks my dream shall be accomplished for I'll have the whole set. I have never dreamt about such a magazine before, but after reading the works of Verue and Wells I looked about and found it. that promote scientifiction are a Godsend. But such stories should be told in one magazine and not distributed through others. As a re-sult, many such stories are lost to me. If any readers are collecting old issues of I may

A. S. and need a few, write to me. have what you want and perhaps will your wauts, when this letter is printed.

A. S. Q. also.

The stories are the best I have read in a long time. Let eolor ruu riot ou your covers.

I like it. Why not print pictures of each planet and their moons as your cover each

Henry Urynowicy, 415 Henderson Street, Jersey City, N. J.

(We appreciate thoroughly what you say about us. Many of our readers as you must have noticed, have written to us saking for old issues of the magazine. You might correspond with them. We originally followed the system of our covers giving a security of the same of the store of the system of our covers giving a security of the same of the store of the system of the system of the same of the store of the system of the s picture you refer to .- EDITOR.)

AMAZING STORIES WON READER; AN AMUSING DESCRIPTION Editor, AMAZING STORIES:

with many other things; one may be born with a liking for science fiction, one may acquire it, or one may have it thrust upou him. The last mentioned fits my own case—and in

a most literal sense. a most iteral sense.
Until four years ago science fiction was entirely beyond my ken; I neither liked it no 'lisliked it: I simply knew nothing about it. Then, one alternoon in the summer of 1928, I was riding home in the subway. The train was not crowded at that hour, and I had ample space to sit and read my favorite paper.

I was engrossed in a news article and totally oblivious of my fellow passengers. Subconsciously I was aware that the train Subconsciously I was aware that the train was alowing for a station, when suddenly a heavy magazine landed in my lap, flattening the spare I held. Startled, I looked up just that the train came to a stop. My eyes met those of a smiling young fellow who was half-uper of a smiling young fellow who was half-up out the door. "There's something worthwhile to read," he called. "Try tit" He vanished, the door closed, and the train roumbed on.

rumbled on. The other passengers were staring at me and to hide my confusion I looked down at the magazine in my lap. Immediately showed the figure of a man suspended in air, without any visible support, while several other figures looked on. The title of the magazine I saw was Amazino Stories but that meant nothing to me; I wanted to know the explanation of that STRANGE PICTURE. On the explanation of that STRANGE PICTURE. On the contents page I learned that the illustration belouged to a story called "The Skylark of Space." I started to read it, became more and more interested, and finally discovered that it was only the first part of a serial.

By that time I had been carried well past
my destination, but I didn't care. Something

opinion that first issue I read is still the best of all I've read since. Though the quality of the magazine has gone down and np zine that has introduced me to science fietle

891 Irvine Street, Bronx, N.

(Your very amusing story is quite well told and we will extend our vicarious thanks to the young man who introduced you to our magazine. We wish there were more of them would be just as good perhaps, if he would repeat the process and claim a salesman's commission. We quite admire your graphic description.—Epiron.)

#### A COMPLAINT ABOUT THE STORY "THE DOUBT" BY ONE WHO LEAVES HIS NAME IN DOUBT

Editor. AMAZING STORIES: I've been reading Amazing Stories for more than a year (and for that matter all other S. F. magazines), but if you again publish such uu-scieutific trash as "The Doubt" I will surely

If you have two or three pages left, the hest thing to do is to extend the "Discussions" de-partment, rather than publish something that lowers our "mag" to the level of "War Lies," "Battle Trash," etc.

Battle Trash," etc.
All the Professor Jameson stories have been After the Allesson james on stories have been accellent; keep them up.

Morey's covers are good, but the name of the nagazine makes me ashamed to show it to my

friends

C. D. G., 7039 Freret Street, New Orleans, La.

(The selection of "The Doubt" for the magazine may be defined as a matter of taste on the part of the Editor. It seemed to us, as it did to many of our readers, an extremely clever hit of psychology and we are sorry that it did not please you. You ought, in writing to a maga-sine, to sign your full name and not merely initials, as you have done .- EDITOR.)

#### A PLEA FOR THE FUTURE OF "AMAZING STORIES"

Editor, AMAZING STORIES:
"Cleon of Yadral"—what a story! It
couldn't have been better if written by A. Merritt himself! More of P. Schuyler Miller's stories, please.

stories, please.

I hear Amaino Storina is soon to come under new ownership. I hope that this doesn't mean that there will be any chauge whatever in the magazine. In its present form and high quality it is the most contrading of the magazines of its kind. Please don't change it.

Harold Sures, th. Avenue, N. E., 19027—1 Manne, Seattle, Washington.

(P. Schuyler Miller does not besitate to tread ou difficult ground, Einstein and Lorenz are directly or indirectly involved in his stories, and that leads to interested and interesting dis-cussions from other mathematicians. We are not planning to change Amazing Stories, ex-cept for the better.—Eurror.)

#### COMPLETE FILES OF AMAZING STORIES

Editor, AMAZING STORIES: With the exception of six scattered numbers, I have a complete file of AMAZING STORIES since the first issue, April, 1926, which I wish to dis-pose of. I also have a complete file of AMAZ-ING STORIES QUARTERLIES which I would like

Would it be possible to have this notice print-ed in one of your issues to acquaint readers with that fact?

Henry S. Ehle, 202 McLain Avenue Rockford, Illinois.

#### BACK NUMBERS OF AMAZING STORIES Editor, AMAZING STORIES:

Since the first issue of AMAZING STORIES came out in 1926 I have always been an ardent reader of this unusual magazine. However, reader of this unusual magazine. However, unlike most people, who, when done with a magazine, throw it aside, I have kept as many of the issues as I could possibly lay my hand on.

hand on.

In looking through some old numbers, however, I find that there are many people who wish to read back numbers and cannot get them for some reason or another. So I am them for some reason or another. So I am writing you to ask you to publish this letter so that some people who are desirous of getting some of the older back numbers can have a chance to get in touch with me. All copies still in excellent condition as they have had nothing but the best of care. Herman Mattheo.

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